EXPLOSION AT THE PACIFIC ENGINEERING AMMONIUM PERCHLORATE PLANT: LOCAL IMPACT AND RECOVERY ACTIVITIES

HEARINGS

BEFORE THE

SUBCOMMITTEE ON
INVESTIGATIONS AND OVERSIGHT

OF THE

COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

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CONTENTS

WITNESSES

June 8, 1988:

Page

Adm. Richard H. Truly, Associate Administrator for Space Flight, NASA, accompanied by: Adm. Stuart J. Evans, Assistant Administrator for Procurement; and George Abbey, Deputy Associate Administrator, Office of Space Flight 7

John A. Richards, Director, Office of Industrial Resources Administration, International Trade Administration, Department of Commerce 14

Daniel S. Rak, Deputy Assistant Secretary of the Air Force for Acquisition Management and Policy, Department of Defense; and Col. Donald G. Bush, Deputy Director, Directorate of Contracting and Manufacturing Policy 38

Courtney A. Stadd, Director, Office of Commercial Space Transportation, Department of Transportation 73

June 24, 1988:

Hon. James H. Bilbray, a Representative in Congress from the State of Nevada 91

Hon. Richard H. Bryan, Governor, State of Nevada 102

Hon. Robert J. Miller, Lieutenant Governor, State of Nevada 104

Robert E. Wentz, Superintendent of Schools, Clark County School District 115

Robert W. Loritz, vice president, clinical service, St. Rose de Lima Hospital 121

James Arrendale, president, Green Valley Community Association 126

Adm. Richard H. Truly, Associate Administrator for Space Flight, NASA. 148

Daniel S. Rak, Deputy Assistant Secretary of the Air Force, acquisition management and policy 157

Grant C. Peterson, Associate Director, State and local programs, Federal Emergency Management Agency 172

Gary Bloomquist, city manager, Henderson, NV 214

John Pappageorge, deputy chief, Clark County fire department, Henderson, NV 225

Mayor Laura Kesterson, Henderson, NV 225

Brian Greenspun, president of the Las Vegas *Sun* 244

Phillip Crawford, BA Productions, Henderson, NV 260

Elaine Arnold, Henderson, NV 262

Louis Kahn, Henderson, NV 266

Bob Seagraves, Henderson, NV 267

Ms. Richardson, Henderson, NV 269

Pamela Walz, Henderson, NV 270

Fred D. Gibson, Jr., chairman and chief executive officer, Pacific Engineering and Production Co., Henderson, NV, accompanied by Keith Rooker, executive vice president 285

George R. Hennigan, Kerr-McGee Chemical Corp., Henderson, NV 329

APPENDIX I

ADDITIONAL STATEMENTS FOR THE RECORD

1. Hon. Joel Hefley, a Representative in Congress from the State of Colorado .. 351
2. Hon. Bruce Woodbury, Commissioner, Board of County Commissioners for Clark County, NV 355
3. Southwest Gas Corp., Las Vegas, NV [attachments retained in Subcommittee files] 358

APPENDIX II

ADDITIONAL MATERIALS FOR THE RECORD

Page

1. Letter from Hon. Robert A. Roe, Chairman, Committee on Science, Space, and Technology, to Hon. Ronald W. Reagan, President of the United States, regarding the decision to deny disaster assistance to Henderson, NV 365
2. Index to news articles on explosion at Pacific Engineering and Production Co. ammonium perchlorate plant, submitted by Hon. Gary Bloomquist, manager, city of Henderson, NV 367
3. Report by George A. Brizendine, P.E.: "Explosion Related Structural Damage: Discussion of Investigation and Identification" 390
4. Interim report on the cause of the Pacific Engineering plant explosion, submitted by Hon. Donald L. Shalmy, Manager, Clark County, NV, on behalf of the Clark County Fire Department 423
5. Correspondence from Steven D. Dorfman, vice president for the Space and Communications Group, Hughes Aircraft Co. to Dr. Larry Martinez, Department of Transportation, discussing impact of ammonium perchlorate shortage on commercial launch industry 426

EXPLOSION AT THE PACIFIC ENGINEERING AMMONIUM PERCHLORATE PLANT: LOCAL IMPACT AND RECOVERY ACTIVITIES

WEDNESDAY, JUNE 8, 1988

House of Representatives,
Committee on Science, Space, and Technology,
Subcommittee on Investigations and Oversight,
Washington, DC.

The subcommittee met, pursuant to call, at 2:10 p.m., in room 2318, Rayburn House Office Building, Hon. Robert A. Roe (chairman of the subcommittee) presiding.

Mr. Roe. The committee will come to order.

The Committee on Science, Space, and Technology is now about to begin its hearing, as publicized, for the rocket fuel allocation in the aftermath of the fuel plant explosion in Nevada.

We have with us everybody ready to go. We apologize to the witnesses. As you know, we were voting on the floor, but now we can settle down and get on with our hearing.

On May 4th of this year, hundreds of workers fled for their lives as the Pacific Engineering plant in Henderson, Nevada, disappeared in a series of explosions. Two people died, as you know, and hundreds were injured. Left behind in the ruins was almost half of the Nation's production capacity for the chemical ammonium perchlorate.

As a result of this disaster in the Nevada desert, the American space effort, both civilian and military, will literally run out of gas, so to speak, some time next year. The chemical produced by this plant is the primary ingredient in the rocket fuel for the space shuttle's solid rocket motors, for the MX and Trident intercontinental ballistic missiles and for such tactical weapons as the Harpoon anti-ship or TOW anti-tank missile.

Even with an all-out effort, the one remaining plant in the United States and all other plants anywhere in the western world can only fill two-thirds or three-quarters of the orders expected from NASA and from the Air Force, and that does not include the Army, the Navy, and the new commercial companies offering expendable launch vehicles—which is very important as a new program here in our country—and whatever demand exists among our allies, and we can expect this situation to persist for almost three years. So what do we do? And that is why we're here, and that's what the purpose of this hearing is about.

Today, we intend to find out where we are at as a result of the accident. We have asked the relevant Federal agencies to describe for us the available supplies of AP—we'll call it that for short—and who will be needing to use that supply. Then we will ask how all of these competing buyers will be accommodated.

Can we manage to launch all of the highest priority payloads on time without using up all the AP available? Will MX production leave anything for anyone else? Should we use expendable launchers for payloads, since they don't need as much AP as the shuttle does? These questions will be aired today.

In two weeks, for the benefit of the members of the committee and those of the public that are interested, we will return to this problem in a second hearing. By then, a preliminary decision allocating the available AP supplies should be made, and we can evaluate that decision in light of the information we receive today. We will also explore the contributions that the Federal Government can make to expedite, as much as possible, the restoration of an AP production capacity sufficient to meet all of our needs and the needs of our allies. We will review the cause of the accident and examine its implications for the future. We hope to gain a clear understanding of what happened on that terrible day in Henderson and learn the reasons why this Nation finds itself with so little of something so important to so many.

I welcome all our witnesses and the participation of my colleagues.

[The prepared opening statement of Mr. Roe follows:]

STATEMENT BY THE HONORABLE
ROBERT A. ROE

CHAIRMAN, SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT OF THE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

ON THE AMMONIUM PERCHLORATE EXPLOSION IN NEVADA AND ITS EFFECTS ON THE U.S. SPACE PROGRAM

8 JUNE 1988

GOOD AFTERNOON, LADIES AND GENTLEMEN. THE SUBCOMMITTEE WILL COME TO ORDER.

ON MAY 4TH OF THIS YEAR, HUNDREDS OF WORKERS FLED FOR THEIR LIVES AS THE PACIFIC ENGINEERING PLANT IN HENDERSON, NEVADA, DISAPPEARED IN A SERIES OF EXPLOSIONS. TWO PEOPLE DIED. HUNDREDS WERE INJURED. LEFT BEHIND IN THE RUINS WAS ALMOST HALF OF THE NATION'S PRODUCTION CAPACITY FOR THE CHEMICAL AMMONIUM PERCHLORATE.

AS A RESULT OF THIS DISASTER IN THE NEVADA DESERT THE AMERICAN SPACE EFFORT, BOTH CIVILIAN AND MILITARY, WILL LITERALLY "RUN OUT OF GAS" SOMETIME NEXT YEAR. THE CHEMICAL PRODUCED BY THIS PLANT IS THE PRIMARY INGREDIENT IN THE ROCKET FUEL FOR THE SPACE SHUTTLE'S SOLID ROCKET MOTORS, FOR THE M-X AND TRIDENT INTERCONTINENTAL BALLISTIC MISSILES, AND FOR SUCH TACTICAL WEAPONS AS THE HARPOON ANTISHIP OR T-O-W ANTITANK MISSILES.

EVEN WITH AN ALL-OUT EFFORT, THE ONE REMAINING PLANT IN THE UNITED STATES, AND ALL OTHER PLANTS ANYWHERE IN THE WESTERN WORLD, CAN ONLY FILL TWO-THIRDS TO THREE-QUARTERS OF THE ORDERS EXPECTED FROM NASA AND

THE AIR FORCE -- NEVER MIND THE ARMY, THE NAVY, THE NEW COMMERCIAL COMPANIES OFFERING EXPENDABLE LAUNCH VEHICLES, AND WHATEVER DEMAND EXISTS AMONG OUR ALLIES. AND WE CAN EXPECT THIS SITUATION TO PERSIST FOR ALMOST THREE YEARS.

SO WHAT DO WE DO? THAT IS WHY WE'RE HERE.

TODAY WE INTEND TO FIND OUT WHERE WE ARE AS A RESULT OF THE ACCIDENT. WE HAVE ASKED THE RELEVANT FEDERAL AGENCIES TO DESCRIBE FOR US THE AVAILABLE SUPPLIES OF A-P (WE'LL CALL IT THAT FOR SHORT) AND WHO WILL BE NEEDING TO USE THAT SUPPLY. THEN WE WILL ASK HOW ALL OF THESE COMPETING BUYERS WILL BE ACCOMMODATED. CAN WE MANAGE TO LAUNCH ALL OF THE HIGHEST-PRIORITY PAYLOADS ON TIME WITHOUT USING UP ALL THE A-P AVAILABLE? WILL M-X PRODUCTION LEAVE ANYTHING FOR ANYONE ELSE? SHOULD WE USE EXPENDABLE LAUNCHERS FOR PAYLOADS, SINCE THEY DON'T NEED AS MUCH A-P AS THE SHUTTLE? THOSE QUESTIONS WILL BE AIRED TODAY.

IN TWO WEEKS, WE WILL RETURN TO THIS PROBLEM IN A SECOND HEARING. BY THEN, A PRELIMINARY DECISION ON ALLOCATING THE AVAILABLE A-P SUPPLIES SHOULD BE MADE, AND WE CAN EVALUATE THAT DECISION IN LIGHT OF THE INFORMATION WE WILL RECEIVE TODAY. WE WILL ALSO EXPLORE THE CONTRIBUTIONS THAT THE FEDERAL GOVERNMENT CAN MAKE TO EXPEDITE, AS MUCH AS POSSIBLE, THE RESTORATION OF AN A-P PRODUCTION CAPACITY SUFFICIENT TO MEET ALL OF OUR NEEDS AND THE NEEDS OF OUR ALLIES. WE WILL REVIEW THE CAUSE OF THE ACCIDENT AND EXAMINE ITS IMPLICATIONS FOR THE FUTURE.

WE HOPE TO GAIN A CLEARER UNDERSTANDING OF WHAT HAPPENED ON THAT TERRIBLE DAY IN HENDERSON AND LEARN THE REASONS WHY THIS NATION FINDS ITSELF WITH SO LITTLE OF SOMETHING SO IMPORTANT TO SO MANY.

I now recognize the distinguished subcommittee's ranking Republican member, Mr. Don Ritter from the great State of Pennsylvania, for his opening remarks.

Mr. Ritter.

Mr. RITTER. Thank you, Mr. Chairman.

I wish to commend you for convening this hearing on a topic which is vital both to national security and the future of the civilian space program.

I am not going to repeat most of the facts since you, Mr. Chairman, have covered them capably and thoroughly in your introductory remarks. I agree with you that the situation we find ourselves in will persist, and, conceivably for up to three years, that we should strive to move as quickly as possible to restore this country's production capacity for ammonium perchlorate. In the meantime, we've got to get to the bottom of finding out how competing users can get the ammonium perchlorate which they need.

There are serious concerns to be weighed here. We must find a way to launch high priority national security payloads, and we must find a way to continue our efforts to restore a viable shuttle program.

One point which I would like to stress is that the limits on the supply of ammonium perchlorate caused by the explosion imposed a great cost on all affected users, and perhaps no one would agree with this more than the businesses that are waiting to launch commercial payloads into space. These are businesses that have their money on the line, they're at risk, they've been in limbo since the Challenger went down, and they're losing money every day that launch vehicles don't fly. I'm sure that our Chairman would agree that any allocation scheme which the task force creates should take the interests of these enterprising companies into account.

I hope that as a result of this hearing the task force has more input into its decisions. I encourage the task force to be innovative in finding ways to allocate the available ammonium perchlorate. Allocating the limited supply of this perilous chemical will necessarily require the wisdom of Solomon, and although we don't necessarily have it, we're here to help in any way that we can.

Thank you, Mr. Chairman.

Mr. ROE. I thank the distinguished gentleman.

The chair recognizes the distinguished gentleman, the chairman of the Subcommittee on Space Science and Applications, Mr. Nelson from Florida.

Mr. NELSON. Mr. Chairman, we had the shortages that could have profound effects upon our access to space for our civilian program, for our military program, and those launch vehicles. It could affect the strategic and tactical weapons in defense, and then, in this struggling commercial launch industry that we're trying to get off the ground, it could have profound effects there.

So I'm grateful for this hearing, and we've got to get to the bottom of this, and I want us to ask some additional questions. How did we get ourselves in a situation where we became so dependent upon only two production plants? And are there any other single points of failure that would limit our national access to space? As we go through these hearings, I wish we would consider those questions.

Thank you, Mr. Chairman.

Mr. Roe. I thank the distinguished gentleman.

Are there any other further opening remarks from the Members? If not, the first order of business, for the benefit of the Members, and also for those of our guests here and our witnesses who haven't seen the videotape, we have a short videotape which actually depicts the explosion that took place. So as our opening effort, let's look at that videotape for a moment, and then we'll go on with our witnesses. So if we'll dim the lights.

[Videotape shown.]

Mr. Roe. At this time, without objection, I'll ask unanimous consent to permit coverage of this hearing by electronic and photographic media. Hearing no objection, it is so ordered, and the committee agrees.

The first distinguished witness with us this afternoon is Admiral Richard H. Truly, associate administrator for space flight in the NASA program, accompanied with Mr. Evans and Mr. Abbey, I believe; and then also we have with us Mr. John Richards, director of the Office of Industrial Resources Administration, International Trade Administration, the Department of Commerce.

We want to welcome all the witnesses here today, and the Chair defers to the distinguished admiral, the Associate Administrator for NASA, who is highly regarded by this committee and does an extraordinary job, and we're glad to have you with us.

We're looking forward to your testimony. I'd rather you do your whole testimony—it's not that long—and then we can pick it up from there. Okay? Admiral Truly.

STATEMENT OF ADM. RICHARD H. TRULY, ASSOCIATE ADMINISTRATOR FOR SPACE FLIGHT, NASA, ACCOMPANIED BY ADM. STUART J. EVANS, ASSISTANT ADMINISTRATOR FOR PROCUREMENT; AND GEORGE ABBEY, DEPUTY ASSOCIATE ADMINISTRATOR, OFFICE OF SPACE FLIGHT

Admiral Truly. Thank you, Mr. Chairman. I appreciate the opportunity to represent NASA here at your hearing this afternoon.

With me is my deputy in the Office of Space Flight, Mr. George Abbey, who, since the explosion, has been essentially working this for me full time, and also to my left is the Associate Administrator for Procurement, Admiral Stu Evans, who also has been working with Mr. Abbey and with the other agencies to take the initial steps to solve this problem.

The destruction of the Pacific Engineering and Production Company—Pacific Engineering plant in Henderson, Nevada, has caused an immediate shortage of these materials, two fatalities, and many injuries to hundreds in the vicinity of the plant, and our sympathy to the victims and their families puts all these concerns in perspective.

Pacific Engineering was one of two major U.S. suppliers of ammonium perchlorate, known as AP. The other supplier is Kerr-McGee Chemical Company, also located in Henderson, Nevada. AP production at this facility was suspended immediately following the Pacific Engineering explosion. These two plants produced all the domestic requirements and the majority of the Free World requirements for AP.

The situation carries serious implications for many programs, and, in our case, the most immediate and the most visible is the space shuttle program. The solid rocket motor is by far the largest user of AP in the United States, with over 1,700,000 pounds of AP per flight set.

Furthermore, our mixed fleet also uses AP in the Titan III's, the Titan IV, the Delta II, and the Scout, and this is NASA's connection to the commercial industry, because we get our mixed fleet[1]—our mixed fleet procurement strategy is one to achieve launch services from commercial companies, so that it also is of extreme importance to us. NASA's requirements are a significant portion of the North American demand.

I do want to say, however, that this situation does not affect the first launch of the space shuttle, and we are doing well on that launch, still shooting for late August—hopefully, maybe, this evening to actually mate the external tank to the two solid rocket motors, which are already stacked at Cape Kennedy.

However, it is extremely difficult at this time to project the impact of this AP crisis, the long-term impact on NASA's shuttle program, and we'll get into that and develop that more in detail here in the hearings.

We had AP essentially completed and at the Pacific Engineering plant for the then-planned fifth and sixth flight sets of the shuttle program. We have four flight sets essentially already delivered and being put into our motors, but we lost two flight sets in the explosion that you just saw.

Mr. ROE. Could you explain for the committee what you mean by a "flight set"?

Admiral TRULY. A flight set is simply the pair of solid rocket motors required for each flight of the space shuttle, and, as I said, that pair of solid rocket motors uses or requires about 1,700,000 pounds of AP, half for each motor.

So we lost two flight sets worth of AP in the explosion.

Mr. ROE. Could you also, if I may interrupt you one more time, Admiral—could you explain to the committee and to those that are here what really the ammonium perchlorate is, and does, as far as the fuel is concerned?

Admiral TRULY. Yes, sir, Mr. Chairman. Ammonium perchlorate is an oxidizer. It is a part of the fuel for a solid rocket motor. The actual fuel for the solid rocket motor, after it has been mixed to the specifications required for that particular system, you mix the oxidizer and a fuel ingredient, which in our case includes metallic particles—a good bit of aluminum—and the end result is a solid rocket motor propellant that is sort of like the texture of a pencil eraser.

So we take huge amounts of the AP to our specification, various quantities, particle sizes, mix it to particular—in a recipe, if you will, between fuel and oxidizer, and blend it, and then take it to our manufacturer, Morton Thiokol, and they take that oxidizer and

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[1] Admiral Truly requested deletion of the phrase, "* * * because we get our mixed fleet—."

the raw fuel, make it into propellant, load it into our case segments, and then after that process and all our checking out, it ends up at the Cape, and you stack, and in the end, in our case, you end up with a solid rocket motor.

So AP is a critical ingredient, and, in general, the process, as I just described, is required for any motor, whether it is a small Sidewinder missile, or a Titan 34D solid rocket motor, or an MX; that's what AP is, it's an oxidizer.

The most critical and immediate concern that we have is returning the Kerr-McGee plant to operation and to augment its production and, further, to reestablish a capability as quickly as we can with the Pacific Engineering, and I'll tell you what we're doing about that in just a moment.

We have been working with the two companies and with various agencies, and particularly in NASA's case, since it's our contracts that had the [2]—we had the capability in place to take the fastest action procurement-wise to do this.

In working with the Department of Defense, we agreed last week that NASA would take the lead, through the Marshall Space Flight Center, and move out on an outline of a recovery plan that we agreed to, to get this capability back into place. We had anticipated this, and we were prepared last Friday, and I'd like to tell you very quickly what we have accomplished and the outline of that plan, if I might.

We took formal procurement action this Monday, on the 6th of June, through Morton Thiokol and issued formal direction to them to, in turn, issue direction to their [3]—work directly with Kerr-McGee and Pacific Engineering to—in a fashion that will allow the companies to invest their money in a facility based on production orders that will come to them from various Government agencies, principally NASA and the Department of Defense, and we can go into more detail of the outline of that plan, if we may.

We are working informally in working out arrangements with both companies today. We have good cooperation with each company, and by the middle of June we expect that Morton Thiokol will have been in a position to issue direction to Pacific Engineering, followed shortly by—also Kerr-McGee, to first—for the Pacific Engineering to build a new facility that will have the capability, and the outline of this plan is that this capability in that case would be about 30 million pounds per year, and the location of that facility, I believe, has not been selected, but they have looked at two or three various sites.

The Pacific Engineering estimates to build such a plant range as short a period of time as six to eight months. There will be a period of time, however, once the plant is complete, to certify the plant, and then of course, after that initial certification of the propellant, we'll fire some small-scale motors, and then in the case of the space shuttle we'll probably move out in parallel to construct and fabricate a full-scale test motor in parallel with flight motors to get back going again.

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[2] Admiral Truly requested deletion of the phrase, "* * * since it's our contracts that had the—."

[3] Admiral Truly requested deletion of the phrase, "* * * issue direction to their—."

In the case of Kerr-McGee, we're also assisting them to upgrade the capacity of their existing plant and to essentially assist them in a company initiative for an expanded capacity of—delta of about plus 20 million pounds per year, and the details of this will be provided to you, I understand, by a short presentation when the Department of Defense representative testifies here in a few moments.

In short, if I might summarize the way that I view the situation, first of all, there has been good cooperation from my point of view between NASA and all the agencies involved in trying to get our hands around this extremely complex and serious problem.

Our first and foremost effort, I believe, must be to safely—but as quickly as we possibly can—to get the Kerr-McGee production back into place. We must rebuild our lost capability, and we have moved out to do so. We must address jointly the difficult job of allocation of the AP to the various users, not only the shuttle and NASA but all of our national users, and, of course, each agency that doesn't get 100 percent of its allocation is going to have to immediately strategize how it is going to take its program and make the best of a difficult situation.

Thank you, Mr. Chairman. I appreciate the opportunity to be here, and we'll be pleased to answer any questions that you may have at the proper time.

[The prepared statement of Admiral Truly follows:]

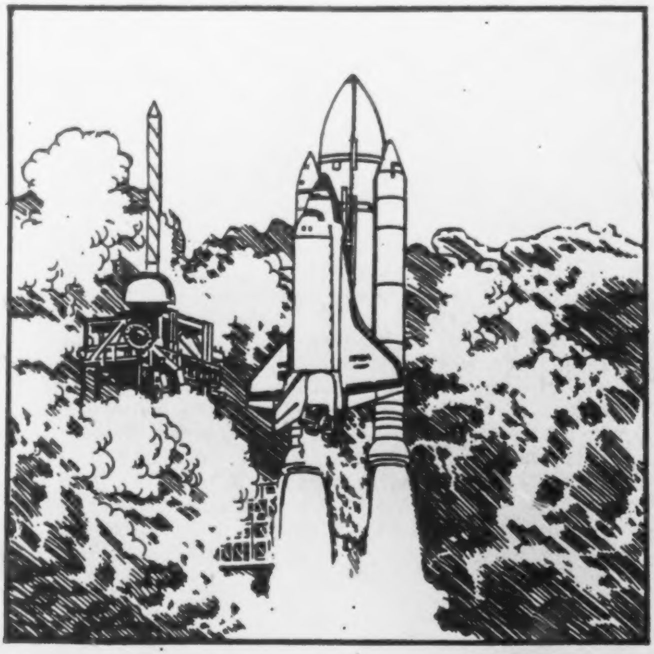
NASA
National Aeronautics and
Space Administration

Hold for Release Until
Presented by Witness

June 8, 1988

Subcommittee on Investigations and Oversight Committee on Science, Space and Technology

House of Representatives



Statement by:
Richard H. Truly
Associate Administrator
for Space Flight

100th Congress

HOLD FOR RELEASE UNTIL
PRESENTED BY WITNESS

Statement of

Richard H. Truly
Associate Administrator
Office of Space Flight

National Aeronautics and Space Administration

before the

Subcommittee on Investigations and Oversight
Committee on Science, Space, and Technology
House of Representatives

Mr. Chairman and Members of the Subcommittee:

I welcome this opportunity to review the circumstances resulting from the destruction of the Pacific Engineering and Production Company (PEPCON) plant in Henderson, Nevada, and the resulting shortage of the oxidizer material, Ammonium Perchlorate (AP), used in solid rocket motors. The accident caused two fatalities and many injuries to hundreds in the vicinity of the plant, and our sympathy for the victims and their families puts other concerns in perspective.

PEPCON was one of two major U.S. suppliers of AP. The other is Kerr-McGee Chemical Company, also located in Henderson. AP production at this facility was suspended following the PEPCON explosion. These two plants produced all the domestic requirements and the majority of the Free World requirements for AP. Estimated production capacity for PEPCON was 30 million pounds per year (operating at 20 million pounds per year at the time of the accident), and for Kerr-McGee, 36 million pounds per year (operating at 32 million).

The situation carries serious implications for the Space Shuttle program. The Shuttle Solid Rocket Motor (SRM) is by far the largest user of AP per motor, with over 1,700,000 pounds per flight set. Furthermore, elements of the mixed fleet of expendable vehicles also use AP for solid propellants. These include the Titan III, Titan IV, Delta II and Scout booster systems. NASA's requirements are a significant portion of the North American demand -- almost 40 percent, for example, in calendar year 1989. Although this situation does not endanger our upcoming launch of STS-26, it is difficult at this time to project the long-term impact with great specificity. AP was essentially completed at PEPCON for the fifth and sixth flight sets and was on hold for rescreening and reblending before shipment to Morton Thiokol. Both those flight sets were lost in the explosion.

Critical to the post-1989 impact on the Space Shuttle and expendable launch vehicle programs is returning the Kerr-McGee plant to operation and augmenting its production, and restablishing a capability at PEPCON. DOD and NASA have jointly agreed on the outline of a recovery plan which will pursue using the capability and experience of these two manufacturers. That work has been started, and the details of the recovery plan are being worked at NASA's Marshall Space Flight Center. Until specific production schedules and capabilities are established and resource allocations are determined, NASA cannot accurately predict the impact on future programs. We shall continue to work closely with the other users in assessing the situation and developing a recovery strategy.

Mr. Chairman, this concludes my formal testimony. We welcome the Subcommittee's interest and assistance in resolving this critical situation and will be pleased to answer any questions you may have.

Mr. ROE. Thank you, Admiral, for your testimony.

The committee is going to recess and go vote, and please return, and then we'll hear from Mr. Richards from the Commerce Department, and then we'll go into our questions. We'll return right away.

[Recess.]

Mr. ROE. The hearing will reconvene.

When we recessed to go vote, we were about to call on Mr. John Richards, director of the Office of Industrial Resources Administration, of the Department of Commerce. Mr. Richards is recognized.

STATEMENT OF JOHN A. RICHARDS, DIRECTOR, OFFICE OF INDUSTRIAL RESOURCES ADMINISTRATION, INTERNATIONAL TRADE ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. RICHARDS. Thank you.

Mr. Chairman, members of the committee, I'm pleased to appear before you today to discuss the Commerce Department's role in the Government's effort to respond to the destruction of the—Pacific Engineering's ammonium perchlorate plant in Henderson, Nevada.

While it is not a direct consumer of AP, the Department of Commerce has an important role, through the Defense Production Act of 1950,[4] to help assure the effective distribution of this material to meet the most critical needs of our space program and our other national defense activities. I will first briefly describe the authority and then how it is implemented.

Title I of the Defense Production Act authorizes the President to, one, require that contracts and orders related to approved defense and energy programs be accepted and performed on a preferential basis over other contracts and orders; and, two, to allocate materials and facilities in such a manner as to promote these approved national security programs.

The President has delegated the authority for industrial resources to the Department of Commerce. Within the Department of Commerce, the Office of Industrial Resources Administration is assigned the task of developing, coordinating, and administering a system of priorities and allocations with respect to these resources. The Defense Priorities and Allocation System regulation has been established for this purpose. It also provides an administrative framework for mobilizing our national industrial resources in the case of an emergency.

Commerce implements the system of authorized agencies engaged in procurement for national defense to use priority weightings on their prime contracts and orders to obtain timely delivery of items needed for the authorized national defense programs.

The National Aeronautics and Space Administration and certain other agencies are further authorized by the Department of Defense to use the Defense Priorities and Allocation System's authority to support their national defense-related activities.

Contractors receiving rated contracts or orders from the Government are obligated under the Defense Priorities and Allocation System to accept the rated contracts and orders, to give production and delivery preference as required to meet the delivery dates on the orders, and to place priority ratings on their contracts to their vendor base to obtain timely delivery of the needed production materials. This process continues from customer to supplier throughout the entire procurement chain.

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[4] Public Law 81-774; 50 App. U.S.C. § 2061, *et seq.*

Many of the Government programs that use AP already carry priority ratings under this priority system. We are working closely with the Department of Defense, NASA, and the Departments of Transportation and State to quantify and evaluate our need for the material and to determine where modifications to the current priority ratings are needed. Providing Defense Priorities and Allocation System support to expedite the construction of new AP facilities is something that we also should consider.

To help ensure the distribution of adequate supplies of AP to meet the most critical space programs and other national defense needs, the Commerce Department could take several actions, including matching the requirements and supply and directing the distribution to the most critical needs, expediting delivery of materials to construct a new AP plant or to increase existing production capacity, and, three, controlling the distribution of AP in the civil marketplace based on a presidential finding under section 101(b) of the Defense Production Act.

As a member of the interagency task force formed to coordinate the Government's response to this disaster, the Department of Commerce is actively involved with the efforts to ascertain ammonium perchlorate requirements and the available supply of the material, to identify the most critical needs, and to develop workable strategies to meet those needs.

Should it be necessary, we will be prepared to take prompt action, as appropriate, in support of our space program and our defense objectives and other critical uses of AP.

Mr. Chairman, I'll be pleased to respond to any questions you may have in this area. Thank you.

[The prepared statement of Mr. Richards follows:]

THE DEFENSE PRODUCTION ACT
AND THE DISTRIBUTION OF AMMONIUM PERCHLORATE

TESTIMONY OF
JOHN A. RICHARDS
DIRECTOR
OFFICE OF INDUSTRIAL RESOURCE ADMINISTRATION

BEFORE THE SUBCOMMITTEE
ON INVESTIGATIONS AND OVERSIGHT
OF THE
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
UNITED STATES HOUSE OF REPRESENTATIVES

JUNE 8, 1988

THE DEFENSE PRODUCTION ACT
AND THE DISTRIBUTION OF AMMONIUM PERCHLORATE

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I AM PLEASED TO APPEAR BEFORE YOU TODAY TO DISCUSS THE COMMERCE DEPARTMENT'S ROLE IN THE GOVERNMENT'S EFFORT TO RESPOND TO THE DESTRUCTION OF THE PACIFIC ENGINEERING AND PRODUCTION COMPANY AMMONIUM PERCHLORATE PLANT IN HENDERSON, NEVADA. WHILE IT IS NOT A CONSUMER OF AMMONIUM PERCHLORATE, THE DEPARTMENT OF COMMERCE HAS AN IMPORTANT ROLE, THROUGH THE DEFENSE PRODUCTION ACT OF 1950, TO HELP ASSURE THE EFFECTIVE DISTRIBUTION OF THIS MATERIAL TO MEET THE MOST CRITICAL NEEDS OF OUR SPACE PROGRAM AND OTHER NATIONAL DEFENSE ACTIVITIES.

I WILL FIRST BRIEFLY DESCRIBE THIS AUTHORITY FOR YOU AND HOW IT IS IMPLEMENTED.

ONE OF THE MOST IMPORTANT LESSONS WE LEARNED FROM OUR WORLD WAR II AND KOREAN WAR EXPERIENCE WAS THE NEED FOR OUR NATION TO MAINTAIN A CAPABILITY TO MANAGE OUR INDUSTRIAL RESOURCES TO COPE WITH ANY FUTURE DEFENSE EMERGENCY. ACCORDINGLY, THE DEFENSE PRODUCTION ACT, ORIGINALLY PASSED TO SUPPORT OUR KOREAN MOBILIZATION ACTIVITIES, HAS REMAINED IN PLACE TO PROVIDE THE PRESIDENT WITH AUTHORITY TO ASSURE THAT OUR ARMED FORCES CAN OBTAIN THE MATERIALS, SERVICES, AND END-USE ITEMS NEEDED TO MEET BOTH CURRENT DEFENSE AND EMERGENCY

MOBILIZATION REQUIREMENTS. DURING THE VIETNAM CONFLICT, THIS AUTHORITY PROVED MOST VALUABLE IN ENSURING THE TIMELY DELIVERY OF URGENTLY NEEDED WEAPONS AND OTHER MATERIALS.

TITLE I OF THE DEFENSE PRODUCTION ACT AUTHORIZES THE PRESIDENT TO: (1) REQUIRE THAT CONTRACTS OR ORDERS RELATING TO CERTAIN APPROVED DEFENSE AND ENERGY PROGRAMS BE ACCEPTED AND PERFORMED ON A PREFERENTIAL BASIS OVER ALL OTHER CONTRACTS OR ORDERS, AND (2) ALLOCATE MATERIALS AND FACILITIES IN SUCH A MANNER AS TO PROMOTE APPROVED PROGRAMS. THE PRESIDENT HAS DELEGATED THIS AUTHORITY FOR INDUSTRIAL RESOURCES TO THE DEPARTMENT OF COMMERCE. WITHIN THE DEPARTMENT, THE OFFICE OF INDUSTRIAL RESOURCE ADMINISTRATION IS ASSIGNED THE TASK OF DEVELOPING, COORDINATING, AND ADMINISTERING A SYSTEM OF PRIORITIES AND ALLOCATIONS WITH RESPECT TO THESE RESOURCES. THE DEFENSE PRIORITIES AND ALLOCATIONS SYSTEM REGULATION HAS BEEN ESTABLISHED FOR THIS PURPOSE. IT ALSO PROVIDES AN ADMINISTRATIVE FRAMEWORK FOR MOBILIZING OUR NATIONAL INDUSTRIAL RESOURCES IN CASE OF EMERGENCY.

COMMERCE IMPLEMENTS THE SYSTEM BY AUTHORIZING CERTAIN AGENCIES ENGAGED IN PROCUREMENT FOR THE NATIONAL DEFENSE, SUCH AS THE DEPARTMENT OF DEFENSE, TO USE PRIORITY RATINGS ON THEIR PRIME CONTRACTS AND ORDERS TO OBTAIN TIMELY DELIVERY OF ITEMS NEEDED BY THESE AGENCIES FOR THEIR AUTHORIZED NATIONAL DEFENSE PROGRAMS. THE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA), AND CERTAIN OTHER AGENCIES, ARE FURTHER AUTHORIZED BY THE DEPARTMENT OF DEFENSE TO USE THE DEFENSE PRIORITIES AND ALLOCATIONS SYSTEM'S AUTHORITY TO SUPPORT THEIR NATIONAL DEFENSE RELATED ACTIVITIES.

CONTRACTORS RECEIVING RATED CONTRACTS OR ORDERS FROM GOVERNMENT AGENCIES ARE OBLIGATED UNDER THE DEFENSE PRIORITIES AND ALLOCATIONS SYSTEM TO: (1) ACCEPT THE RATED CONTRACTS OR ORDERS, (2) GIVE PRODUCTION AND DELIVERY PREFERENCE AS REQUIRED TO MEET DELIVERY DATES, AND (3) PLACE PRIORITY RATINGS ON CONTRACTS AND ORDERS TO THEIR VENDOR BASE TO OBTAIN TIMELY DELIVERY OF NEEDED PRODUCTION MATERIALS. THIS PROCESS CONTINUES FROM CUSTOMER TO SUPPLIER THROUGHOUT THE ENTIRE PROCUREMENT CHAIN.

MANY OF THE GOVERNMENT PROGRAMS THAT USE AMMONIUM PERCHLORATE ALREADY CARRY PRIORITY RATINGS UNDER THE DEFENSE PRIORITIES AND ALLOCATIONS SYSTEM. WE ARE WORKING CLOSELY WITH THE DEPARTMENT OF DEFENSE, NASA, AND THE DEPARTMENTS OF TRANSPORTATION AND STATE TO QUANTIFY AND EVALUATE OUR NEED FOR THE MATERIAL AND TO DETERMINE WHETHER MODIFICATIONS TO THE CURRENT PRIORITY RATINGS ARE NECESSARY. PROVIDING DEFENSE PRIORITIES AND ALLOCATIONS SYSTEM SUPPORT TO EXPEDITE THE CONSTRUCTION OF NEW AMMONIUM PERCHLORATE FACILITIES IS SOMETHING THAT WE MAY ALSO WANT TO CONSIDER.

TO HELP ENSURE THE DISTRIBUTION OF ADEQUATE SUPPLIES OF AMMONIUM PERCHLORATE TO MEET THE MOST CRITICAL SPACE PROGRAM AND OTHER NATIONAL DEFENSE NEEDS, THE DEPARTMENT OF COMMERCE COULD TAKE SEVERAL ACTIONS, INCLUDING: (1) MATCHING REQUIREMENTS WITH SUPPLY AND DIRECTING DISTRIBUTION, (2) EXPEDITING DELIVERY OF MATERIALS TO CONSTRUCT A NEW AMMONIUM PERCHLORATE PLANT OR TO INCREASE EXISTING CAPACITY, AND (3) CONTROLLING THE DISTRIBUTION OF AMMONIUM PERCHLORATE IN THE CIVILIAN MARKET, BASED ON A PRESIDENTIAL FINDING UNDER SECTION 101(B) OF THE DEFENSE PRODUCTION ACT.

AS A MEMBER OF THE INTERAGENCY TASK FORCE FORMED TO COORDINATE THE GOVERNMENT'S RESPONSE TO THE DESTRUCTION OF PACIFIC ENGINEERING AND PRODUCTION COMPANY, THE DEPARTMENT OF COMMERCE IS ACTIVELY INVOLVED WITH THE EFFORTS OF THE DEPARTMENT OF DEFENSE, NASA, AND THE DEPARTMENTS OF TRANSPORTATION AND STATE TO ASCERTAIN AMMONIUM PERCHLORATE REQUIREMENTS AND THE AVAILABLE SUPPLY OF THE MATERIAL, TO IDENTIFY THE MOST CRITICAL NEEDS, AND TO DEVELOP WORKABLE STRATEGIES TO MEET THOSE NEEDS. SHOULD IT BE NECESSARY, WE WILL BE PREPARED TO TAKE PROMPT ACTION AS APPROPRIATE, IN SUPPORT OF OUR SPACE PROGRAM, OUR NATIONAL DEFENSE OBJECTIVES, AND OTHER CRITICAL USES OF AMMONIUM PERCHLORATE.

MR. CHAIRMAN, I WILL BE PLEASED TO RESPOND TO QUESTIONS FROM YOU AND OTHER MEMBERS OF THE COMMITTEE.

Mr. Roe. I thank the distinguished gentleman.

Let me take a minute before we go to questions, just quickly, so we can sum up where we think we're at, at least as we interpret your testimony today.

In effect, what we have is two major production facilities for the ammonium perchlorate. One is the PEPCON—the plant that blew up, and the other is the Kerr-McGee plant, both of which are located in Henderson, Nevada—is that correct?—I understand within two miles of each other, and they are the two major production plants. They are the two only production plants in the United States. Is that correct, basically?

Admiral Truly. That's correct.

Mr. Roe. Okay.

And now we're coming back and saying, as I understand the present situation, that the management at Kerr-McGee had agreed not to open or reopen their production facility, which is about half the supply, until the investigative work was done on the PEPCON program and whatever. However, a week later they decided, "Well, maybe we'd better go ahead with it." As I understand it, the governor [5] got into the act and said, "Well, wait a minute. We've got to take another look at this whole thing," and all kinds of concerns are now registered in Nevada, and particularly in this area. That's how we understand the issue as far as the committee is concerned. Is that correct, pretty much?

Admiral Truly. Mr. Chairman, as I understand it, the Kerr-McGee plant was opened for about 24 hours, and I believe they shut it down again on their own volition and have been doing preparatory safety inspections, including outside oversight, prior to making the decision to reopen the plant.

Mr. Roe. Then aren't we basically saying that immediately before us, and not in any way vitiating or not giving our fullest attention to the local situation—I mean the people of Henderson, the people of Nevada. We're very much concerned about that, and in two weeks time, as we mentioned, we'll be getting into that situation, that part of it, in more detail. Our purpose today is to determine what the impact is upon Federal Government programming and how we go from there.

Having said that, it seems to me we have two issues before us. One is the definitive one, how we replace the capacity of the PEPCON operation, or roughly half our supply, what we do, and you did speak to that issue.

In the meantime, the Kerr-McGee is the only facility we have that is potential for production, and then the question comes back and says, one, do we work out some satisfactory agreement with the officials of Nevada and the different agencies to get that Kerr-McGee plant open again so we at least have some production going on while we're looking to replace the PEPCON plant, or are we faced with a much more extraordinary, difficult problem, which would be the closing of the Kerr-McGee plant for an extended period of time? Is that a fair commentary to make, basically?

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[5] Hon. Richard Bryan, Governor of Nevada.

Admiral TRULY. Yes. We very much need, under the proper conditions, to reopen the Kerr-McGee plant. If, in fact, that was not possible to be done, this serious situation would turn far more—it would [6] have far more implications.

Mr. ROE. That's exactly it.

The next point I want to make to you before we get into questions by Members, and so that the case is clearly set, it is not only our own domestic issues, such as NASA and DOD plus the peripheral and the commercial aspect, it's also our allies such as Ariane [7]—the Ariane French people, and who else in the NATO group, would you say? I suppose that should go to the military to respond, but——

Admiral TRULY. I don't have that on the tip of my tongue, but it is true that we do supply to our allies a portion of our U.S. production in order for their—some [8] of their programs to operate.

Mr. ROE. Okay. That sets the stage.

Therefore, let me ask you this question, which may be considered to be a mickey; I don't mean it to be. From what we see, we consider this situation to be very, very, very serious to the entire space program of the United States, both our domestic program and our military program. Do you think that we're at an emergency status yet?

Admiral TRULY. No, sir, I don't. I think that we are at a very serious situation and we're going to need a lot of cooperation, continuing through the allocation progress, but if we can get the Kerr-McGee plant open, if we can make those tough early allocation decisions, if we can move out both with the Kerr-McGee Company, not in Henderson, but with them to expand in another location, and also with Pacific Engineering, within a couple or three years this immediate effect will be behind us and we'll be in good shape. But it is going to take that kind of work from everybody concerned to get over it.

Mr. ROE. Well, it's important that we establish this. I don't want to look at the issue emotionally or any other way, just factually. That's what we're trying to get at, and we are saying this, as I hear it: If we can get the Kerr-McGee program back into operation to everybody's satisfaction, we only have half of our supply; that's what we said. If we come to a point of view where it takes us two years or three years to build another production plant, we still have that two- to three-year hiatus in between with only half the supply. So that's got to have some bearing upon NASA's manifest, if everything went well on that basis, and DOD's manifest. Is that correct?

Admiral TRULY. It certainly will, and I think you'll see that later when the DOD—they have some charts to show that.

The principal downfall [9] is in the year of 1989, and, of course, that is a propellant for various users for the—you know, that year and the next.

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[6] Admiral Truly requested deletion of the phrase, "turn far more—it would ***.

[7] The Ariane is an expendable launch vehicle operated by Arianespace, a commercial entity which includes the French space agency CNES [Centre National d' Etudes Spatiales] as a stockholder.

[8] Admiral Truly requested deletion of the phrase "their—."

[9] Admiral Truly changed "downfall" to "shortfall."

Mr. Roe. But I think, Admiral, for the record—then I'll defer to the distinguished gentleman from Pennsylvania—we have now only half our national supply; half our supply is gone, regardless of all the jargon in between. We've got to do something on that. Is that correct?

Admiral Truly. Yes, sir.

Mr. Roe. The chair recognizes the distinguished gentleman from Pennsylvania, Mr. Ritter.

Mr. Ritter. Thank you, Mr. Chairman.

Thank you, gentlemen, for your testimony.

In terms of new production capability, what are the possibilities of bringing in chemical companies, for example, that have ammonia production capability? There's a lot of that in the United States. How difficult is it to convert from, say, the production of ammonia to the production of ammonium perchlorate?

Admiral Truly. I'm personally not conversant on the exact process, but I can [10]—I can say that in our plan to get capability back as quickly as we can, we did survey the available manufacturers that could produce ammonium perchlorate. There are two [11]—essentially two processes. These two plants did not have identical processes, and it was clear that the way to, in the immediate future, to resolve the immediate problem is with Kerr-McGee and with Pacific Engineering. This does not in any way preclude, should the demand require it in the future, going to even a third source, and that is something that's not precluded but we have not—we have—[12] this is not the time to do that. We have more important things to do immediately.

Mr. Ritter. Given the fact that one of these suppliers has just had a plant explode, it would perhaps be difficult to get the permitting again in that particular area to reconstruct that plant, and it might be difficult for them to get permitting anywhere. Is it not appropriate to perhaps bring in the idea of the third supplier to the system?

Admiral Truly. That is one of the issues that very definitely needs to be worked through the procurement process, and we have set in motion the working people through our contracting that will demonstrate whether or not this is an issue that will keep the company from rebuilding.

However, I must say that it appears that the initial planning for construction of a plant for that company outside of Henderson is—or remote from Henderson—is a feasible thing to do. Right now, we don't see any show stoppers, but if it becomes clear that that is a problem, I can assure you we will immediately take the appropriate action to adjust for that.

Mr. Ritter. How long would it take to create a new plant, particularly if you're looking at a more remote area, divorced somewhat from population areas?

Admiral Truly. The estimate of the company is that it could be done in less than a year. Our experience tells us that in a new plant there would probably be some bugs to be worked out after it had been built.

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[10] Admiral Truly requested deletion of "I can—."

[11] Admiral Truly requested deletion of "two."

[12] Admiral Truly requested deletion of "we have not—we have—."

The reason that they believe that they can do it so quickly is that they do have a facility designed that they are ready to move out on. Number two, they were able, I understand it, to salvage some equipment out of the old plant that would be usable, and that would save them some time; and they have the people to, you know—to get it done.

But I think the next several weeks of working out the details of their plan, whatever location—the location issues that they're working with, our contracting people will make it clear whether or not—what the real schedule is.

Mr. **Ritter**. One last question. How important—what would happen if we couldn't get Kerr-McGee's existing sound production back on line? What would then happen to our schedule of flights and launches if there was some kind of monkey wrench thrown into the process? How bad would that be?

Admiral **Truly**. I believe that that would have an unacceptable impact nationally to far more than space shuttle flights. The list of users of ammonium perchlorate is essentially every user; either commercial, national security, NASA, or foreign—our allies; that use solid rocket motors. Solid rocket motors are used—the most visible ones are shuttles and Titans and Minutemen and MX's and Tridents, but there's also tactical [13]—small tactical missiles, just innumerable number of important users, some far larger than others. Shuttle tends to get the publicity in the issue, but the inability nationally to keep that capability open, I think, would be an emergency.

Mr. **Ritter**. Thank you, Mr. Chairman.

Mr. **Roe**. The chair recognizes the distinguished gentleman from Missouri, Mr. Volkmer.

Mr. **Volkmer**. Thank you.

I have been told—and perhaps you can verify it, if you know or not, or disclaim it—that one of the areas that is now being looked at is on an Indian reservation. Is that correct or incorrect?

Admiral **Truly**. I understand that one of the locations that the company was considering was on an Indian reservation, but I honestly am not up to date on their internal plans on location now. I do know that since that early report, that they are looking at other locations.

Mr. **Volkmer**. Well, how is it proposed that the company rebuild—PEPCO? How is it going to be capitalized? Who is going to do it?

Admiral **Truly**. I think I'd like to turn that question over to Admiral Evans, who is our AA for procurement in NASA. Stu, could you help?

Admiral **Evans**. The discussions we have had to date with PEPCON and with Thiokol—through whom we are working, as Admiral Truly said—is based on a set of plans that PEPCON has been able to put together to rebuild. Their estimate is six months. We have not seen enough in detail to know whether it's a good period of time or not.

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[13] Admiral Truly requested deletion of "tactical."

One of the sites they were looking at was on an Indian reservation. They are looking at others. The criteria are largely remoteness, for obvious reasons, access to power, transportation, both highway and rail, and there are at least two sites they have looked at that have this.

I could elaborate on what Admiral Truly said in terms of their—their [14] feeling they can be on line in six months. They have saved, or were able to save, a great deal of the designs of their existing plant. They have the people and the personnel—and a good deal of that plant is based on experience, it's based on some patents, proprietary processes, all of which they know. So probably their biggest advantage, there may be 15 to 20 absolute key people who've been with the company 15 or more years. They also produce some of the critical anodes that they need in the process. They do it for this and for some environmental programs they're involved in.

They have been looking at all sources as far as equipment for this plant, both new and used. They feel quite optimistic that production facilities—that is, the tooling and the like—can be obtained in a reasonable period of time.

We would assist them by the same device we used back in 1981, and if I could——

Mr. **Volkmer**. Elaborate on that.

Admiral **Evans**. I beg your pardon?

Mr. **Volkmer**. Elaborate on that.

Admiral **Evans**. Well, in the period, '79, '80, '81,[15] we, with DOD, looked at projections for demand for ammonium perchlorate. At that period of time, what was then known as Pacific Engineering, which is now PEPCON, had a production capacity of about four and a half million pounds a year. Kerr-McGee, the only other source, had a production capacity of about 12 million pounds a year.

Our projections in '79/'80 [16] time frame were in the area of 80 million pounds. A lot of the studies we made also showed us that no one else in this country had produced or attempted to produce ammonium perchlorate since about the mid-60's.[17] There were two other sources that had done it then, Pennsalt Chemical and Hooker. They both went out of the business. They found it was uneconomic and not productive business for them.

Working through the solid rocket motor contract with Thiokol and very much participants in the entire process, we negotiated an expansion of the Pacific Engineering facility from four and a half million pounds in increments. It could have gone as high as about 54 million. At the time of the loss, it was operating at about 30 million pounds.

We did that through subcontracts on our basic rocket motor contract. We financed it largely through the form of a surcharge on each pound of ammonium perchlorate, which wrote off the cost of expansion.

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[14] Admiral Evans requested deletion of "their."

[15] Admiral Evans changed this to "1979, 1980, 1981."

[16] Admiral Evans changed this to "1979/1980."

[17] Admiral Evans changed this to "mid-1960's."

Mr. VOLKMER. Was that at 2 percent?

Admiral EVANS. It varied between the two companies. It was about 5 cents a pound.

Mr. VOLKMER. All right.

Admiral EVANS. In the case of Kerr-McGee, we went through an expansion program with them, taking them from 12 million pounds a year up to their present capacity of approximately 36. Kerr-McGee financed the entire expansion, and, again, that was paid for on the basis of a surcharge, and a different surcharge, to write off the costs of the expansion through the purchases of ammonium perchlorate. A surcharge was applied to all purchases, not only NASA but DOD—any purchases—to write it off.

We turned to that device this time because it was in place. Both those subcontracts are still in place. One of them—the facility, obviously, doesn't exist, but the subcontract is there. We did so after canvassing sources in this country. One of the difficulties—and I'm talking short term again. Surely in the long term—three years, something like that—we can probably get a third source, but I'd like, if I may, to address the immediate actions we took and why we took them.

The Chairman has summarized very clearly the situation we face, where we have lost half the capacity of not only this country but almost—well, our allies, too. And the question arose, how quickly can we move to restore this in the short term? So we moved to the same two devices that we used before: to, in one case, have the company restore its capability, and the other case, the company to expand its capability, in both cases remote from built-up areas, significantly remote from built-up areas.

I think one of the reasons they started in Nevada, and the reason they are staying in Nevada, is a significant and major element in the production of ammonium perchlorate; is cheap power. That is a major factor, and, of course, it is present in Nevada.

I would anticipate that within perhaps the next ten days we will have a considerable amount of detail in terms of the restoration plans on the part of PEPCON and the expansion plans on the part of Kerr-McGee. These would go in parallel with the actions that Admiral Truly talked about in terms of reopening the Kerr-McGee plant and then allocating the production that they have. I feel confident, through this way, we can perhaps have PEPCON back on line again, having built the plant, tested it, qualified it, begin to get ammonium perchlorate probably within a year.

Mr. VOLKMER. Now as I understand, what you're telling me is that capitalization then would come from PEPCON and they'd be paid, as they have been, under the augmentation back in 1981 on a percent basis.

Admiral EVANS. That is the set of instructions[18]—guidelines—we gave to Thiokol in dealing with them. It came on the basis of discussions with PEPCON executives likewise, whereby they felt confident, if we could enter into an arrangement, as we previously had, that they could obtain the financing, and as recently as a day or so ago they were still stating the same thing. We will know that, I think, within a week to ten days.

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[18] Admiral Evans requested deletion of "instructions."

Mr. VOLKMER. As I understand it—correct me if I'm wrong—is that both PEPCO and Kerr-McGee are really subcontractors; they're not contractors.

Admiral EVANS. That's correct; they're subcontractors.

Mr. VOLKMER. Morton Thiokol and others are the primary contractors.

Admiral EVANS. Yes, and they are suppliers to all the major solid rocket motor manufacturers in our country.

Mr. VOLKMER. And the—as I understand it, Morton Thiokol is supposed to—what?—oversee the construction of everything.

Admiral EVANS. They will have a part; they will definitely be observing and overseeing the construction, as will our representatives likewise, because it is—the whole construction would be taking place through a subcontract arrangement, in this case with PEPCON, but I dare say that NASA will take, and DOD will take, a considerable interest in oversight and the construction likewise.

Mr. VOLKMER. As I understand it also, Morton Thiokol receives no remuneration as far as the Government is concerned.

Admiral EVANS. There's no fee on this, no, sir.

Mr. VOLKMER. No fee for them at all——

Admiral EVANS. No, sir.

Mr. VOLKMER [continuing]. Involved in this; either upgrading Kerr or increasing their capacity or getting PEPCO back on line.

Admiral EVANS. There's no fee, and there's no loading on it.

Mr. VOLKMER. I think my time has probably expired. I do have additional questions.

Mr. ROE. We'll be back; we'll be coming back again.

The chair recognizes the distinguished gentleman from California, Mr. Packard.

Mr. PACKARD. Thank you, Mr. Chairman.

Admiral Truly, could you or those associated with you there at the table give me again a quick review of what our current total supplies are from all sources—how long it would last.

Admiral TRULY. It varies. I can't speak for the [19]—I can speak for the space shuttle program. What we have on hand and already delivered is enough for four flights.

Mr. PACKARD. For four flights. And according to current schedule, that would take us then just into next year.

Admiral TRULY. It would. Of course, if that was all we were going to get, we would obviously—that's the reason I said that whenever we have this thing straightened out, each user will have to have its own strategy as to how to best do that.

I am not conversant with the exact numbers, but they are available, and we can supply them, as to what is on hand at Kerr-McGee and if we can get them open. But it is a significant amount of ammonium perchlorate in their inventory, and, of course, they have the capacity to produce a great deal more, once they are safely open, to the end of this year and on.

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[19] Admiral Truly requested deletion of the phrase, "I can't speak for the—."

Mr. **Packard**. The AP that was produced at PEPCON and that at Kerr-McGee's: is it the same, is it interchangeable with all your different vehicles that require AP?

Admiral **Truly**. The ammonium perchlorate, of course, is a specific product, but each user has to have its own specifications for the specific grain size or particle size of it, and so it is not generally interchangeable between users, and the producer produces it per the specification and blends it.

Mr. **Packard**. With PEPCON down now, what vehicles will be most affected by that, assuming there will be no change in the product that comes out of Kerr-McGee?

Admiral **Truly**. Well, the Kerr-McGee plant, if they have an order from any source that is qualified to use their propellant, they can essentially meet that order. I would prefer that the DOD speak for their own programs, but I understand that there were some that were qualified only from the Pacific Engineering plant. In our case, we were getting supplies from each of the two producers, and so our problem in the case of shuttle is simply one of allocations and timing on the blending, and so forth. We are qualified at the Kerr-McGee plant, and we'll be qualified, naturally, after we certify any new facility, whether or not it is Kerr-McGee, a new Kerr-McGee increase, or a new Pacific plant.

Mr. **Packard**. Is there very much ammonium perchlorate produced from foreign sources that we use in this country?

Admiral **Truly**. We have that data, but it's a very small amount, and it essentially is not exported, it's used for their own——

Mr. **Packard**. We export much more than we import.

Admiral **Truly**. Yes. As a matter of fact, I don't believe we import [20]—at the time of the explosion, I do not believe that we imported any. All of our domestic production was coming from these two plants, although I might stand corrected; I think that's true.

Admiral **Evans**. That's correct.

Mr. **Packard**. If a new plant is built in the six months to up to two or three years—and I come out of local government, where I'm aware of the problems of just approval processes. To get something like this done, it could very well take up to two and three years. After the plant is built and they're ready to produce, what requirements of certifying and qualifying would DOD, NASA, require before the product could actually be put on line and be used?

Admiral **Truly**. Well, let me speak strictly for shuttle. We anticipate that we would go through an initial certification period of, I would say, three to six months, using small motors, and that would allow us to have the confidence then to do two things in parallel: one, to receive AP for flight motors and begin preparing shuttle solid rocket motors for flight and, at the same time in parallel, receiving AP to be put into a full-scale test motor as, you know, like we were testing before the space shuttle first flight, and that would be the final test. We would not fly it on the shuttle without a full-scale demonstration that their product met our specifications on an instrumented motor.

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[20] Admiral Truly requested deletion of the phrase, "* * * I don't believe we import—* * *."

So that process, once the doors are open and AP is being produced, I see a few months period to get that certification [21]—initial certification and then ten months to a year before the first flight of the space shuttle would occur, using AP produced out of this new plant. So it is not a quick process.

Mr. PACKARD. Okay. Under those assumptions, then, what other alternatives do we have in an attempt to keep as much of the schedule preserved as we can for launching of not only the shuttle, but other launches?

In terms of alternatives to AP or those vehicles that use a smaller amount of AP, is there some consideration of transferring payloads to other vehicles that would—that would conserve what little AP we have?

Admiral TRULY. Well, as a matter of fact, there are considerations, and I would call that a part of a strategy to save AP, and, as a matter of fact, we may need your help because it may take—in this case, it may be [22]—it will take money to do some of these things, but there are some payloads that could, for example, fly for less AP—Titan, rather than on the shuttle, and we've identified those, you know, in our mixed fleet proposal, and there are trades like that that can, should, and will be made.

But as far as alternatives to AP as a product to fire solid rocket motors, we can invest in a research program for the future, and there may be possibilities there, but there is—there really is no immediate option, and, therefore, we have taken the actions to get back into the proper capacity just as quickly as we can.

Mr. PACKARD. Well, in view of that statement, my concern is that we find ourselves with the only two plants available to produce AP—well, now only one, but we only had two. In the long term, what are we doing to diversify the location and the number of plants that would not put us into this box again?

Admiral TRULY. We have had quite a bit of discussion on that very point, and I intend to continue to pursue it within NASA and in coordination, particularly, with DOD since we have the capability to cause the plants to be put into place.

We don't think that we are smart enough today to move out on a program like you suggest, but I can assure you that we—it is very much on our platter as to whether or not we should move out on such an option.

We do believe that in our projections, with the expansion that I've described and our projection of the future, that for the next few years we would have ample capacity, once we can get what I have described into place. But I believe that we definitely should look at this single- or dual-point wicket through which so many of our vital national programs are traveling.

Mr. ROE. Will the gentleman yield?

Mr. PACKARD. I'll be pleased to yield to the Chairman.

Mr. ROE. I think we have to make a point quite clear, and it's apparent, and I don't think we can dance around it. One thing is for sure, without any further debate, that we are 50 percent, roughly, down in supply. I mean, no matter what you do at this point, if it takes a year, two years, or three years, we're 50 percent down on supply.

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[21] Admiral Truly requested deletion of "certification—"

[22] Admiral Truly requested deletion of the phrase, "* * * it may take—in this case, it may be—* * *."

Now what does that tell me? In looking over our whole—our just-passed authorization, NASA budget—you know, authorization, the DOD legislation, and what the plan is for the manifest of the shuttle, what the plan is for the Titan, what the plan is for the commercial program, we're in trouble. We're not going to be able to perform that unless we do some miracle, and certainly the idea of their building a plant in six months is sheer lunacy, because just to get the environmental impact statement alone—that's why I was asking about the idea, do we consider it a national emergency, where a whole new set of rules would come into play? That's one.

Two, it seems to me, as the gentleman from California is pointing out, now's the time to make the decision. I would hope that we wouldn't go and build a new plant for the—what is it?—the PEPCON group, and build that within two miles of the McGee plant; that's sheer lunacy—in other words, how we ever wound up with a program in the United States where the entire supply of the ammonium perchlorate was all done at Henderson, Nevada, within two miles of each other.

So I heard you say earlier—and you'll pardon my enthusiasm at the moment, but we've got to get it squared away—I heard you say that we should be doing something at Kerr-McGee, and we certainly have to replace that PEPCON plant; that's what we're saying, and then Mr. Evans was explaining—Admiral Evans—how we're going to do it. Okay.

Now it would seem to me one decision we could make is that if we're going to locate an auxiliary production facility of Kerr-McGee, we're not going to be able to add an addition on, Kerr-McGee plant in the middle of Henderson, where one just blew up, and I don't think you've said that. So it would seem to me that anything that's going to be done with Kerr-McGee is going to have to be done outside in a remote area.

Then the next question comes: How close is that going to be to the PEPCON plant—two, three miles, five miles? How does that affect national security at this point? Why should we have two plants of this nature both that closely together? And I think that's what the gentleman's hitting on. I think he's right.

Go ahead.

Mr. PACKARD. To reclaim my time, my concern is that we have—and it's easy to have benefit from hindsight, but we've made some tragic mistakes in putting all of our fuel eggs into one little area, where a catastrophe of this nature could shut us down, and my concern is that we're going to repeat that for the long-term future; and then I would like to see if there are other critical areas in terms of the viability of maintaining our space program that are also in a position where one tragic accident could shut us down for another two or three years.

We're just to the point now where we think we're recovering from the Challenger accident, which none of us believed would shut us down for three years, three years ago—or two and a half years ago—but it has. Now we see, just as we're emerging from that, we have another critical portion of the program, the fuel sources, that could shut us down, or at least partially shut us down, for another two or three years.

I would like to see us evaluate every critical area in our space program that have the potential of shutting us down, and then evaluate whether our long-term planning in that specific area is such that we have alternatives that we can rely on and fall back on if and when there is a catastrophe that happens, and then as we replace these programs, such as the one that we're talking about, I should hope that we would not make the same kind of mistakes where a simple accident—and it wasn't a simple accident, but one accident can literally destroy one whole phase of our program. That's where we're at. And this committee is becoming more and more upset with the fact that, one by one, these are happening, and virtually we have no alternatives.

And then the Chairman mentioned another area that was a very important area to me, and that is—and I have no indication, I don't think any of us have any indication, that this accident had anything to do with national security, or espionage, or anything like that—but it certainly does demonstrate that——

Mr. ROE. Well, it could happen.

Mr. PACKARD. —that all an enemy to our program would need to do is look for a program like this, or an area like this, where they could create an accident and shut us down. They wouldn't have to blow up our launch facilities; they would not have to do something very open and unique, all they'd have to do is just shut off one particular source of, in this case, fuel, and we're shot down. I would hope that we don't put ourselves into this kind of position, and yet we seem to be doing it over and over again.

I'd like you to respond.

Admiral TRULY. Mr. Packard, thank you very much, and I agree with very much of what you said, as a matter of fact. There's one point that I want to make clear though, in case I have been confusing, and I want you to know that it's part of our plan.

Neither the new Pacific plant, nor the new Kerr-McGee facility that will have about plus 20 million pounds per year, will be built in Henderson, nor will it be built a mile or two away from each other, and I hope I haven't confused anybody on that.

The expansion that I mentioned of the Kerr-McGee plant—the current plant is really an expansion that's totally internal to its mechanisms and facilities, and they are capable of——

Mr. PACKARD. Let me interrupt you there for a moment, Admiral. Is it anticipated that the Kerr-McGee plant, when it opens, will remain open and that the expansion of Kerr-McGee would be to a separate facility?

Admiral TRULY. Yes, it will.

Mr. PACKARD. So that the production will continue from Kerr-McGee in its existing plant.

Admiral TRULY. Yes. Two things on Kerr-McGee. Let me try to make it—say it better. First of all, there is a capability within their existing plant, after we get them open, for them to produce at a higher capacity [23]—slightly higher capacity than they were producing at the time of the——

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[23] Admiral Truly requested deletion of "higher capacity."

Mr. **Packard**. In their existing facilities?

Admiral **Truly**. In the existing facility. But that is not an expansion in Henderson, Nevada, of that Kerr-McGee facility, other than internally to their mechanisms. The expansion—the new facility for Kerr-McGee will be done essentially the same contractually as we're doing the one for Pacific Engineering.

Mr. **Packard**. One last question. I know my time is up.

Mr. **Roe**. Will the gentleman yield? I'll give him more time. Just yield on that.

Mr. **Packard**. Please.

Mr. **Roe**. We're making one assumption, however. The assumption we're making is that we're going to get the Kerr-McGee plant open again. Isn't that fair commentary? That's what we're hoping for. Is that right?

Admiral **Truly**. Yes, and that is mandatory for us to do.

Mr. **Roe**. All right. But now the governor of that State, together with the officials in that State and the citizenry, are already talking about going to court. They're annoyed with Kerr-McGee, because they applauded the plant for closing voluntarily for a week, and then the management decided to open, according to the reports we received, and then when they started to go ahead they figured they were breaking faith, and then McGee again took the approach that they wouldn't open right away.

So the assumption—this is where I'm coming from—the assumption that this plant, the existing Kerr-McGee plant, which is a key issue, will be opened within a reasonable period of time is, indeed, an assumption. Is that fair play?

Admiral **Truly**. Until it opens, it is. But let me say that I——

Mr. **Roe**. Now wait. If you'll just yield to me—and I have the highest regard for you, you know. I'm just trying to set a case here. I'm simply trying to say that as this time frame exacerbates itself on the Kerr-McGee situation, that has an eight to ten months lead time to other substantial problems for all of the different agencies—isn't that fair play?—in every damned manifest you have, and so forth and so on. So every day that we delay in opening the Kerr-McGee plant, whatever the reason may be, further exacerbates our problem down the road. Is that fair commentary?

Admiral **Truly**. You are exactly right.

Mr. **Roe**. Therefore, the key issue to look at here is, what do we do for Henderson and the people of Nevada to be able to recognize the import? And I don't want to get to the point that this is not—it's just a perfunctory hearing. It is no intention of being a perfunctory hearing. I happen to personally believe that with that one decision alone, that this country is on the brink of a national emergency. I really believe that to be so, and unless we do something and do it quickly and effectively—and I'm not suggesting that the military and you are not doing that. You understand where I'm coming from? I think we may have to do something much more rapidly than you believe at this particular point, particularly if that whole thing gets into the courts.

The chair recognizes the gentleman from California.

Mr. **Packard**. You addressed my last question. That is, for whatever reasons Kerr-McGee would be closed on a semi-permanent basis for public opinion in Henderson, or the governor, or whatever reasons, the Kerr-McGee plant could not continue to operate. Where would we be? What would that do to our space program?

Mr. ROE. If we have an emergency at that point?

Mr. PACKARD. With both plants permanently shut down, or at least until we could replace them somewhere else.

Admiral TRULY. Yes, and that's what I tried to say a while ago. I think that would turn a very serious national problem into an emergency for the Nation, and that's the reason that we are working so hard to make sure and take account of the horrible experience of the citizens of Henderson and to try to deal, through an appropriate mechanism, to assure them—not just to assure them without it being true, but to assure them that the reopening of Kerr-McGee can be done safely, and we're working hard to do that.

But, as I said in my summary, the first thing that we must do is assist them [24]—assist this total situation to get that plant open.

Mr. ROE. Is anybody listening to the people of Henderson?

Admiral TRULY. Yes, sir.

Mr. ROE. Okay. The chair recognizes the distinguished gentleman from Florida, Mr. Nelson.

Mr. NELSON. On the basis of what you gentlemen have said today, it seems to me if the Kerr-McGee plant, in fact, does resume production and that we have 50 percent of our capacity produced, that we are still nearing the national emergency conditions when you consider the needs of the ammonium perchlorate by the Defense Department. Not only does the Defense Department have to do the tactical and strategic weapons, but the Defense Department has to concern itself with the launch of satellites, not only on the expendable launch vehicles but on the space shuttle as well.

Now in terms of national priorities, certainly the defense of the Nation is at the top of the list, but there also happens to be some high national priorities in some deep space probes, such as Magellan [25] and Galileo [26] and so forth, and when you add all of that up together, it seems to me that there is just simply not enough.

Now given this condition, who would determine if a national emergency is declared?

Admiral TRULY. I'm sure, ultimately, the President.

Mr. NELSON. Is the President personally aware—do you have any knowledge—of this situation?

Admiral TRULY. I have not personally had the opportunity to brief the President, but I can assure you that he is aware of it, and we are working closely with the White House as we deal with each of these issues—the plant, the expansion, the Nevada situation, the local situation. We are working every avenue that we know hard, including the White House.

Mr. NELSON. Are you considering the option of recommending from your perspective as NASA to the President of declaring a national emergency?

Admiral TRULY. I don't think we're there yet at all.

Mr. NELSON. Why not?

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[24] Admiral Truly requested deletion of "assist them."

[25] The Magellan mission will be launched to the planet Venus to map the planet's surface with radar.

[26] The Galileo mission will carry out multiple high-resolution photographic surveys of the planet Jupiter and its moons, and will launch a probe into the Jovian atmosphere.

Admiral **Truly**. Because we think we're going to [27]—we think we are going to safely, legally get the Kerr-McGee plant open, and hopefully in the next few days we will face up to the allocation problem between the various agencies and users, and we are already moving out on the capacity. If those things are done, I don't think it would take that extreme. If we are unable for a period of time to get over that hurdle, I would not hesitate for a moment to recommend such a thing, but I don't think it would take me personally at my level to recognize that. But I don't think we're there yet.

Mr. **Nelson**. You have testified here today that we have enough for the two SRM tests plus the first four flights of the shuttle. That's a cut-off before we try to launch Magellan, the Hubble Space Telescope,[28] and Galileo. All of those are not within the first four flights.

Admiral **Truly**. Well, I said we had four flight sets' worth of motors. If that was all we were going to get, we would reassess, I'm sure, with the DOD, for whatever down period we had, how we would use those flight sets.

But you're right, the first four flights on our present manifest do not include those most important civil space exploration payloads.

Mr. **Nelson**. Of the four flights, two are DOD and two are TDRS,[29] all important to the Nation. So how can you tell me that, in your opinion, that a 50 percent supply over the next three years of ammonium perchlorate does not create conditions that are near national emergency?

Admiral **Truly**. I'm [30]—I don't think I am saying that. What I am saying is that we have a very serious situation on our hands. We think we know what to do about it, and we're working all avenues to do it, and if our plan works—the first part of which is to get the present plant open—that the impact will be serious but it will not be of the magnitude [31]—it will not be of the magnitude of a national emergency. It could quickly get that way, and if we're not successful I'm confident that we will—you know, we would take a much more—we would go to the President and do whatever we had to do.

Mr. **Volkmer**. Would the gentleman yield?

Mr. **Nelson**. Certainly.

Mr. **Volkmer**. This follows along just what—I was going to ask a similar question, but you did, but there's one additional to that. Could any of those missions that the gentleman from Florida has mentioned be placed on expendable ELVs [32]—the two DOD's, the two TDRSs, or at least the second TDRS?

Admiral **Truly**. Yes, they could. The Magellan could fly. If you recall our budget request, we have a Titan IV requested as an alternate planetary that could be used for—and the logic of that was to be used either for Magellan or Galileo or, I believe, Ulysses.[33]

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[27] Admiral Truly requested deletion of the phrase, "* * * we think we're going to—* * *."

[28] The Hubble Space Telescope is a complex of optics and instruments designed to examine the universe in the visible light portion of the electromagnetic spectrum. It will be deployed into low Earth orbit from the Space Shuttle and maintained by regular Shuttle resupply missions.

[29] Tracking and Data Relay Satellite.

[30] Admiral Truly requested deletion of "I'm—."

[31] Admiral Truly requested deletion of the phrase, "* * * it will not be of the magnitude * * *."

[32] Expendable launch vehicles.

The TDRS spacecraft—we have done an integration study for the out-years and believe that we know [34]—that we understand technically the integration between the TDRS spacecraft and the Titan III, and that is a part, if you recall, of our budget request in the mixed fleet for commercial launch services from the Martin [35] Company for a Titan III that would be compatible with TDRS. Either of those approaches would require ammonium perchlorate. Pardon me. Either of those approaches would require less ammonium perchlorate, but they do require ammonium perchlorate, and if the—you know,[36] if the facility isn't there producing it, you know, it's an academic question. That's why I say that the Kerr-McGee plant must be reopened.

Mr. **Volkmer**. Go ahead.

Admiral **Truly**. But there is a study to be done comparing the [37]—the use of the amount of ammonium perchlorate for various payloads that could fly either on the shuttle or on an ELV.

Mr. **Volkmer**. Well, perhaps when we get the military up, the DOD witnesses, we can find out if we still have any of those old Titans left.

But you mentioned the use of a Titan IV. It's my understanding from staff that PEPCO is the only one that qualifies their ammonium perchlorate for Titan IV's.

Admiral **Truly**. That's my understanding too, but I would prefer that you get the details of that from the DOD witness, if you would, sir.

Mr. **Volkmer**. I thank the gentleman from Florida for yielding.

Mr. **Nelson**. Mr. Chairman, I'm not through. I've got a few more questions here.

Mr. **Roe**. Okay. The gentleman from Florida is recognized.

Mr. **Nelson**. If the ammonium perchlorate required for a Titan IV is less than half of the amount that is required for a space shuttle, and if this is not approached in an emergency—a national emergency kind of approach in which somebody is going to flat make a decision soon and get the production lines cranked up again and get the new facility built, and qualified, and cranked up again, then conceivably what we could be doing in an allocation of the remainder that is left that is being produced, it would be allocated to expendable launch vehicles instead of the space shuttle because of the needs or the amount being required. Is that a possibility, Admiral Truly?

Admiral **Truly**. Well, my feeling is that even though the space shuttle does require more ammonium perchlorate than other boosters and, as you said, you're about right—I forget the numbers, but the AP required for Titan IV is about half that for shuttle. On the other hand, there are other cases where there is no other way to space for national space payloads than the space shuttle, and, furthermore, there are already requirements on the DOD's Titan IV line for missions that are not manifested on the shuttle. In other words, the Titan IV production would have to go up.

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[33] Ulysses is a joint U.S.-West German mission designed to send a spacecraft over the Solar polar regions.

[34] Admiral Truly requested deletion of "that we know."

[35] Martin-Marietta manufactures the Titan expendable launch vehicle.

[36] Admiral Truly requested deletion of phrase, "* * * if the—you know, * * *."

[37] Admiral Truly requested deletion of "the."

So what you have is a major trade-off that has to be done between vehicles, between agencies, and between purposes—civil space, national security, commercial space.

Mr. NELSON. Admiral Truly, you get right down. Let me just tell you that the experience of this committee before you came back with NASA was not a very happy one when we saw the need right after the Challenger disaster to get a replacement orbiter built, and it took, through indecisiveness, the total of eight months before a decision could ever be made to move ahead with the building of a replacement orbiter, and what I'm concerned about is, if somebody in the administration doesn't pick up the ball and make a decision, that through indecision we're losing precious days of getting the capability of the country back to what we have to have and what our allies have to have—and I'm purely—I'm not directing that at you personally because, obviously, you're not the person to make that decision. I wish you were, because if you did, I know that we'd be up and running with the plants.

Now there's one other alternative that we hadn't explored here, and this is not a pleasant alternative. There are six flight sets of old solid rocket boosters. Would we ever go back and try to launch with the old SRBs?

Admiral TRULY. We're seriously thinking about how those boosters might be used, but I—it's very premature to know whether we—what options, manned or unmanned, that we have.[38]

Mr. NELSON. Do you have any insight into what led us to this position that we only had two production companies and that they were located very close to each other? As you have wrestled with this, do you have any insight into who made that decision, and how did it happen?

Admiral TRULY. No, I don't. Admiral Evans may have it.

Generally in this business, we are satisfied with dual sources. In other words, if—generally, dual sources are considered to be adequate, but in this case, obviously, I think it's—hindsight would say that in this case putting them right next to each other was—was a mistake.[39]

The reason they are close, though, in that area is the availability of power. But no, I don't know the history of that. Admiral Evans might want to make a short comment.

Mr. NELSON. No. Let me continue. I'll get to Admiral Evans in a minute.

Let's go from hindsight to foresight. In looking to the future, what is NASA doing now to try to find out if there are any more of these kind of single point failure situations that could drastically affect our space program? And then I'll ask that same question of the Department of Defense.

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[38] Admiral Truly amended his response to read: "We're seriously thinking about how those boosters might be used, but it's very premature to know what options, manned or unmanned, that we have."

[39] Admiral Truly amended this sentence to read: "In other words, generally, dual sources are considered to be adequate; hindsight would say that in this case putting them right next to each other was a mistake."

Admiral **Truly**. We—I've spent my efforts since the—on this subject since the Henderson accident [40] in trying to make sure that we, as much as we could, gather data with existing or nonexisting companies, the local situation, and working principally with the DOD. I absolutely agree with you that such an assessment needs to be made. I have not started one, but I'm going to within[41]—within the shuttle program.

Mr. **Nelson**. Admiral Evans, do you have any insight, in hindsight, as to why this strategically important chemical was, in fact, in two production facilities right there near each other?

Admiral **Evans**. In the case of—in the case of Kerr-McGee, Mr. Nelson, they've been there 25, 30 years, going back to the '50's.[42] Pacific Engineering, as it was then called, came along a short time later. The location was the choice of the companies. We did not really become seriously involved in this until about '79 or '80 [43] when we foresaw the growth requirements for ammonium perchlorate and, acting through Thiokol on the subcontract basis, moved to expand the capacity of both.

At that time, in law, we had no authority to direct dispersal. We don't have the same basic authority that the Department of Defense does to disperse facilities or have second sources for mobilization purposes. So, statutorily——

Mr. **Nelson**. Let me interrupt you just a minute. Do you have any evidence, looking back in hindsight, that anyone ever raised that question at the time? It's not a question of whether or not you had the authority. Did anybody in NASA raise that question at the time?

Admiral **Evans**. It was discussed from the standpoint of two sources or three sources, as we are now. We have, by no means, ruled out a third source.

Mr. **Nelson**. Well, then, I commend you. I commend not you specifically; if you were involved, I certainly do. I commend the organization that they would raise that issue and come to a point at which they said, "Well, we don't have the legal authority."

You say the Kerr-McGee plant went back 25 years.

Admiral **Evans**. Or more.

Mr. **Nelson**. And the Pacific came on line when?

Admiral **Evans**. I am trying to recall, Mr. Nelson. I think in the—I'm guessing now—early '70's.[44] It was a small business company there.

Mr. **Packard**. Would the gentleman yield for just a moment on that point?

Is—we have two sources, or we did have before the explosion. Is there sufficient business for three or more sources to operate without—and still have the companies viable economically?

Admiral **Evans**. This is one thing we really—we really want to find out, Mr. Packard. We've been told by one company no. Three sources with requirements we're projecting now say 65 million pounds—something like that. One company says, "No. We'd probably get out of the business."

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[40] Admiral Truly amended this to read: "I've spent my efforts on this subject since the Henderson accident * * *."

[41] Admiral Truly requested deletion of "within."

[42] Admiral Evans amended this sentence to read: "In the case of Kerr-McGee, Mr. Nelson, they've been there 25, 30 years, going back to the 1950's."

[43] Admiral Evans changed this to read: "1979 or 1980."

[44] Admiral Evans changed this to "1970's."

Mr. **Packard**. I see. Thank you.

Admiral **Evans**. We honestly don't know, but we intend to find out.

Mr. **Nelson**. Thank you, Mr. Chairman.

Mr. **Roe**. We're about to vote, so we'll go do that. But I think we have exhausted this part of our review, and when we return we would like Admiral Truly to remain and Mr. Richards to remain, if you don't mind, and then we'd like to have Mr. Daniel Rak come up here, Colonel Donald Bush, and Mr. Stadd, and then we'll proceed on from there. We'd like to get the response from DOD at this juncture.

The committee will stand in recess. Would you please vote and return immediately so we can proceed.

[Recess.]

Mr. **Roe**. The committee will reconvene and we'll hear from Mr. Rak, Daniel S. Rak, who is the Deputy Assistant Secretary of the Air Force for Acquisition Management and Policy, the Department of Defense.

The Chair recognizes the distinguished gentleman.

STATEMENTS OF DANIEL S. RAK, DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE FOR ACQUISITION MANAGEMENT AND POLICY, DEPARTMENT OF DEFENSE; AND COL. DON G. BUSH, DEPUTY DIRECTOR, DIRECTORATE OF CONTRACTING AND MANUFACTURING POLICY

Mr. **Rak**. Thank you, Mr. Chairman. I also had the privilege of being the chairman of the Ad Hoc AP Advisory Group, which was established as soon as we discovered[45]—learned of this incident here.

I do have a few opening remarks which will describe the ammonium perchlorate situation and summarize the actions we are taking to correct the shortage of capacity.

Ammonium perchlorate is, as we have been establishing, an essential ingredient in the manufacture of solid propellant rocket motors. It is used by virtually every solid rocket manufacturer in the U.S. That includes the Space Shuttle, Titan, Delta space boosters; the Peacekeeper,[46] the Trident strategic missiles; tactical missiles used by all services.[47]

It is imperative, therefore, for the U.S. to have an adequate industrial base for this product.

Mr. **Roe**. Would the gentleman yield? Your opening part to that, just would you mind restating that again, please? Just that section; I just missed it, I'm sorry.

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[45] Mr. Rak requested deletion of "discovered."

[46] Commonly referred to as the MX.

[47] Mr. Rak revised this paragraph to read: "Ammonium perchlorate is, as we have been establishing, an essential ingredient in the manufacture of solid propellant rocket motors. It is used by virtually every solid rocket manufacturer in the U.S. That includes the Space Shuttle, Titan, and Delta space boosters; the Peacekeeper, and the Trident strategic missiles; and tactical missiles used by all services."

Mr. **Rak**. I said I have the honor of being the Chairman of the Ad Hoc AP Advisory Group——

Mr. **Roe**. Right, but then you were starting to express your concern with the severity of the potential.

Mr. **Rak**. Ammonium perchlorate is an essential ingredient in the manufacture of solid propellant rocket motors, strategic as well as tactical, and space launchers, expendable launch vehicles.

On May 4th, 1988, as we all know, an explosion virtually destroyed the production facilities of the Pacific Engineering and Production Company of Nevada, which is referred to as PEPCON. This was one of only two U.S. suppliers of ammonium perchlorate; the other being the Kerr-McGee Chemical Corporation.

PEPCON represented approximately one-half of the U.S. capacity, and I think it is essential to note that this is one-half of the capacity and not necessarily one-half of the supply available or the demand.

Mr. **Roe**. You mean of production capacity.

Mr. **Rak**. Production capacity, that's correct.

Mr. **Roe**. Yes, sir.

Mr. **Rak**. On May 5th, 1988, the Air Force initiated an effort through the Defense Priorities and Allocation System structure to begin collecting requirements data in anticipation of the expected shortage. On the same day, we also formally recommended to the Under Secretary of Defense (Acquisition),[48] that DOD establish a centralized effort to address the loss of capacity.

On May 6th, 1988, the Under Secretary designated the Air Force as the lead service for DOD. On May 9th, 1988, the Air Force, acting for DOD, joined with NASA to initiate action to recover the U.S. industrial base and manage the existing supplies and future production of this product.

Within two weeks, both PEPCON and Kerr-McGee requested an opportunity to present proposals to restore our production capacity. PEPCON presented its proposal on May 16th and Kerr-McGee presented its proposal on May 18th.

On May 20th, the AP Advisory Group, about which I mentioned earlier, was formed. It is comprised of representatives from OSD,[49] NASA, the Army, Navy and the Air Force. During the next two weeks, this group reviewed capacity and demand projections, examined alternatives and developed a recommendation for restoring our production capacity as expeditiously as possible.

On June 3rd, 1988, one month after the incident, the Under Secretary of Defense (Acquisition) and Admiral Truly, the Associate Administrator of NASA, accepted this recommendation and discussions were immediately initiated with the two contractors, as has been indicated earlier, which will, we believe, ensure the prompt restoration of our industrial capacity.

Throughout, under the auspices of the National Security Council Task Force that had been established, we have been in touch with the Departments of Commerce and Transportation.

Through a unique combination of civilian and military agencies, and with the cooperation of the only two U.S. producers of ammonium perchlorate, we have set in motion, in less than a month, a course of action which will not only recover our industrial capacity in as short as possible time, but minimize the length and the extent of our shortfall.

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[48] Hon. Robert Costello.

[49] Office of the Secretary of Defense.

Indeed, if the Kerr-McGee plant reopens by mid-month—that is, by the middle of this month, June, I can't emphasize this enough [50]—and we have been discussing that and emphasizing throughout the course of the earlier part of this hearing—although there will be delays in product deliveries and disruptions to motor production schedules, we expect to be able to satisfy all known calendar year 1988 AP requirements.

Moreover, if the construction of the additional facilities, as has been earlier indicated by PEPCON and Kerr-McGee, is completed as scheduled, we can reduce the shortfall in calendar year 1989 to less than 3 million pounds. We are presently working on developing recommendations for a process and methodology for minimizing program disruption and allocating available AP supplies.

Since we have been concentrating on restoring capacity, we have not completed this work and therefore have no plan to report to you at this time.

I have personally been impressed by the commitment and the cooperation displayed by the members of the Advisory Group and the two U.S. AP producers. This is an example of American teamwork, people from both the private and public sector working together toward a solution to a critical national problem.

We are prepared to provide a briefing to you, the same one that was provided to our decisionmakers last Friday, but I believe that in the earlier testimony, the substance of that briefing has pretty well been covered.

I would like to offer it for the record, however, and I would like to have Colonel Don Bush, sitting here at my right, show you three or four slides which I think may help to put into perspective the questions of the process for making ammonium perchlorate, as well as the capacity which now exists and the demands that we anticipate.

Colonel Bush headed the Working Group, the Ad Hoc Working Group that participated with us, provided us information in that advisory group.

With your permission, I would like——

Mr. Roe. The Chair recognizes Colonel Bush.

Colonel Bush. Mr. Chairman, if I might, just for a moment, go over the process that is used in this production of ammonium perchlorate, there are a couple of unique factors here.

[See slide 1.]

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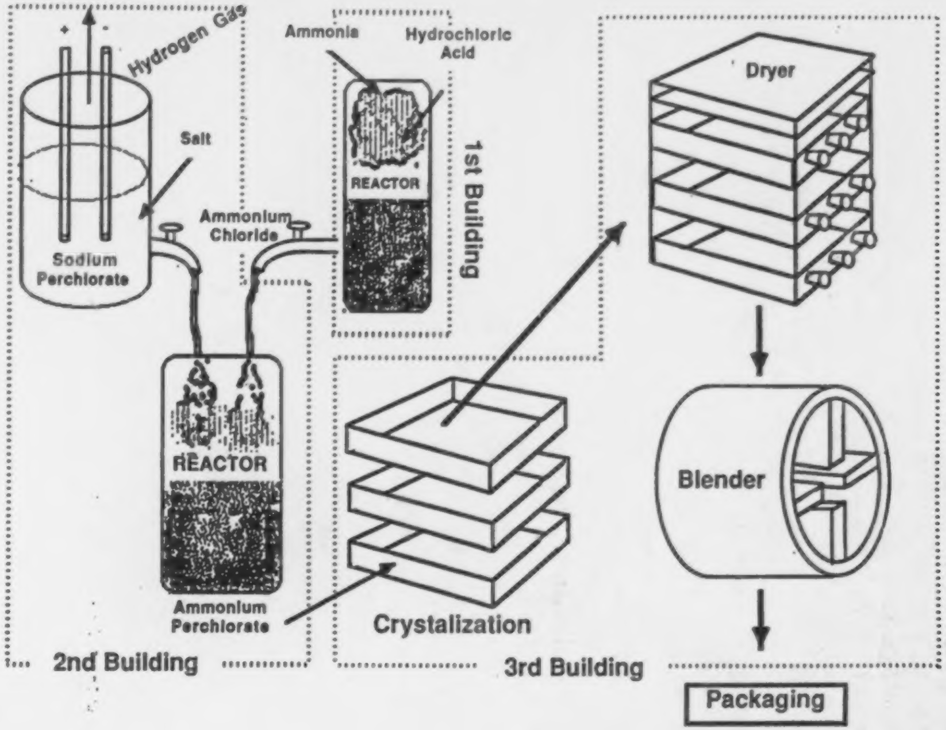
[50] Mr. Rak revised this to read "Indeed, if the Kerr-McGee plant reopens by the middle of this month, June, and I can't emphasize this enough * * *.

AMMONIUM PERCHLORATE PRODUCTION PROCESS



Hydrogen Gas
+
-
Salt
Sodium Perchlorate
Ammonium Chloride
Ammonia
Hydrochloric Acid
REACTOR
1st Building
REACTOR
Ammonium Perchlorate
2nd Building
Crystalization
3rd Building
Dryer
Blender
Packaging

SLIDE 1

The product basically starts with a simple compound of salt and water. It goes through an electrolysis process that produces the sodium perchlorate solution, combined with an ammonium chloride solution, and we get a liquid ammonium perchlorate product.

Up to this point, this is a relatively simple chemical process. It is at the stage that this liquid is converted into the crystals that are necessary to be used in the solid rocket motors. It is—at this stage, it is no longer the simple chemical process.

There is an art involved in translating the liquid to the crystal product that is used in the motors. There is, also, additionally needed experience in drying this product and finally blending these lots together to make the proper product to satisfy those motor manufacturers' needs for the propellant.

So I just wanted to briefly go over this process. This is one of the issues that has been discussed as to the availability of additional sources. It's primarily in this area where the proprietary process is and the skills and experience are necessary in the process.

[See Slide 2.]

CAPACITY

ESTIMATED U.S. CAPACITY FOR AMMONIUM PERCHLORATE

(PRE-EXPLOSION)
(MILLION POUNDS PER YEAR (MPY))

	PEPCON	KMCC
ACTUAL PRODUCTION RATE, MAY 4	20	32
MAXIMUM CAPACITY	40	36*

BOTTOM LINE: REMAINING CAPACITY, 36 TO 40

*POTENTIAL EXISTS FOR 40 MPY

Colonel **Bush**. If I may leap around, I would like to take two areas that have been discussed in the previous—previous testimony and then like to point out a couple of key charts that I think may be instructive.

Looking at capacity, and it has been—it has been mentioned on a number of occasions and, of course, much in the press, that we lost one-half of the capacity for production of this product. But I would like to point out a difference here.

On May 4th, the production rate for both the facilities was running at approximately 52 million pounds a year. Their actual maximum capacity totaled about 76 million pounds of capacity. When we look at the Kerr-McGee Corporation, we can see that there are some processes and things we can do from some of the other parts of the product that we can increase that maximum production from 36 to 40 million pounds a year.

So if I could ask you to keep in mind that 40-million-pounds-per-year capacity, I would now like to compare this with the demand data that we have been accumulating since early morning on the 5th of May.

[See Slide 3.]

AMMONIUM PERCHLORATE (AP) DEMAND
(MILLIONS LBS)

	1988	1989	1990	1991	1992	1993	1994
ARMY	9.3	14.0	11.7	9.1	9.1	9.4	10.3
NAVY	3.7	6.5	5.4	5.1	5.1	5.1	5.1
AIR FORCE	11.0	11.5	16.1	12.9	10.0	10.0	10.0
NASA	8.5	19.8	22.1	24.2	28.0	31.3	29.7
	32.5	51.8	55.3	51.3	52.2	55.8	55.1
COMMERCIAL	3.5	3.7	5.2	.4	1.0	.6	.6
EMLRS	1.8	2.6	5.3	5.3	7.0	5.3	5.3
OTHER EXPORT	1.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL DEMAND	38.8	60.1	67.8	59.0	62.2	63.7	63.0

Slide 3

Colonel BUSH. Either my chart's too big or the screen is too small. Let me just simply take the first years of this—what you're not seeing on the chart are additional years here.

We have built this demand data from a program-by-program analysis throughout the DOD and, of course, with the cooperation of NASA; all of the services have made inputs. As you can see here, these are our demand projections throughout these years.

We have to note that in 1988—of course, we are part way through the year—some of the 1988 demands have already been met earlier in the year, but this is the remaining requirement for 1988. But as you can see, the DOD/NASA demands run in the low- to mid-50s.

We have also accumulated commercial—and this, essentially, you could call commercial space requirements. We have accumulated this data and broken it out and are keeping track of this separately, and should point out that our data, we feel, is pretty good through the first years. We are still working on better data for the out-years. We would expect——

Mr. ROE. Would the gentleman yield at that point?

Colonel BUSH. Certainly.

Mr. ROE. I think it is important to point out, however, as Admiral Truly was starting to develop, that where the commercial relationship is involved, and I see you have broken that out, right——

Colonel BUSH. Yes, sir.

Mr. ROE. You have 3.5, 3.7, 5.2. The relationship between the commercial and NASA for ELVs also is an integral part of NASA's planning, as far as launching is concerned. I'm thinking of the ELVs. Isn't that correct?

Colonel BUSH. That is correct.

Mr. ROE. That is also true with the military.

Admiral TRULY. That is correct. There are some [51]—some NASA missions, or at least to answer your question——

Mr. ROE. Yes.

Admiral TRULY [continuing]. From NASA's point of view, there are some NASA missions whose AP is represented on this chart, either under commercial or in some cases, under Air Force or DOD because we—you know, the early ELV part of the mixed fleet is obtained through the quid pro quo agreements that we have with the Air Force.

Mr. ROE. I understand that.

Admiral TRULY. That is an important——

Mr. ROE. I understand that, but where I am coming from, just for the record—I understand what you're saying—there still is refinement involved as far as we coming to out-years is concerned, I would think, where that commercial relationship is—that's not clear. I just wanted to make sure that commercial and the other export and so forth are not just simply something—a third party we can put off or put aside without evaluating the commercial relationship to NASA launches.

I think that is fair commentary.

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[51] Admiral Truly requested deletion of "some."

Colonel **Bush**. The reason I point this out, Mr. Chairman, is to show you that we are giving consideration to that type of data.

Mr. **Roe**. Good.

Mr. **Rak**. I would like to add, also, that we expect the commercial demand to stay constant, and in fact, perhaps rise in the out-years, but the data that we have been able to collect supports only that relatively small figure that you see there on the chart, 92.[52]

Mr. **Roe**. I understand, yes.

Colonel **Bush**. So if we take these demand numbers, low- to mid-50s, for DOD and NASA; low- to mid-60s if you combine everything together, we believe there is a difference between losing half of the capacity and the ability, then, to produce against these demand figures.

What I have is a chart that I do not believe will go on the screen—— [53]

Mr. **Roe**. If the gentleman would yield one more time just for clarity.

However, as Admiral Truly pointed out, and his colleagues, that the crystalline composite of the material is not uniform for all uses, as I understand the discussion, that there were different formulae that had to be followed and so forth, so there is a little lack of flexibility there to a degree. Is that reasonable?

It is not just a question of, say, allocate to DOD and we'll allocate to NASA or we'll allocate to commercial. We have to allocate, I would think, in the formula relationship of the material that is available for their specific use.

Colonel **Bush**. There are three particle sizes, two drying methods and one [54] blending method that make that a combination of those factors—so you are correct, sir, it is not just a simple matter of taking here from here and giving it to this——

Mr. **Roe**. That's the point I wanted to make for the record. Okay.

[See Slide 4]

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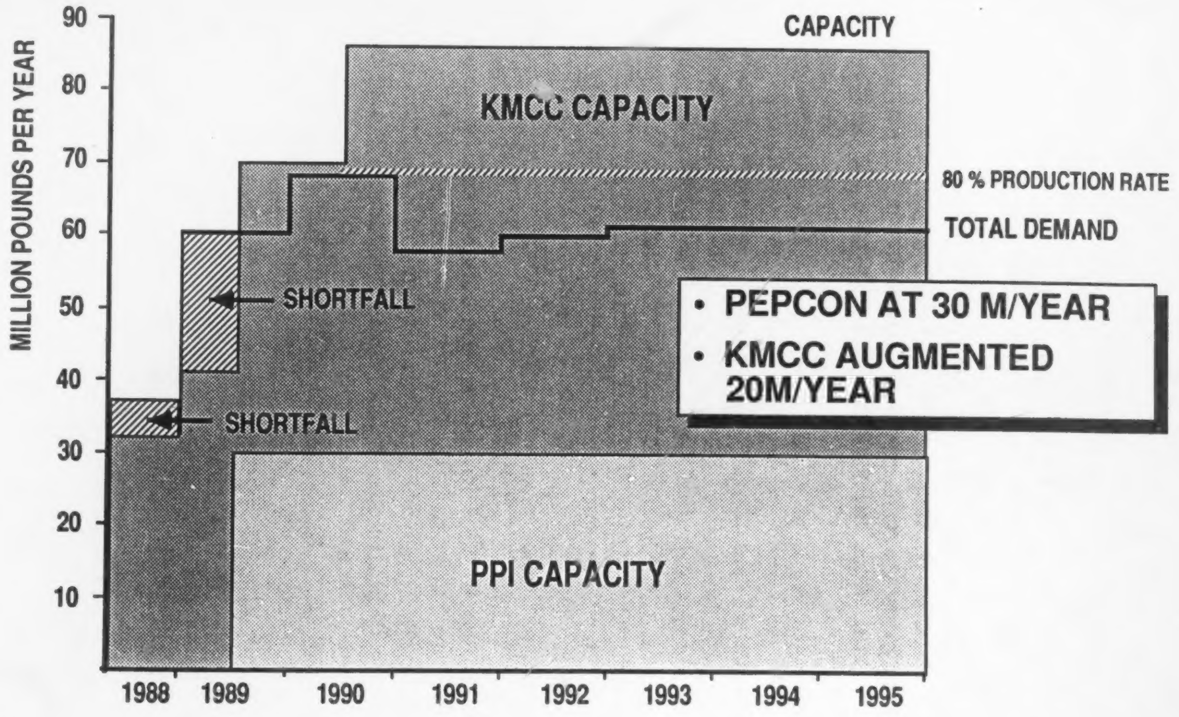
[52] Mr. Rak changed " '92" to "in 1992."

[53] Mr. Rak asked that this sentence be deleted.

[54] Mr. Rak indicates that "one" should be "two."

CAPACITY VS DEMAND



- PEPCON AT 30 M/YEAR
- KMCC AUGMENTED 20M/YEAR

SLIDE 4

Colonel Bush. What we have tried here is to provide a summary all in one chart of the way we see the situation. Essentially what we have to date—and this involves itself with some inventory that we have on board—it's Kerr-McGee's capability to produce through the end of the calendar year 1988 just over 30 million pounds. Our demand in that period is just over 37 million pounds.

Using inventories that have built up at various facilities around the country, we really believe that we will be able, in the calendar year, to fundamentally handle that requirement. That does not mean that there will not be some slippages within the month. There will have to be some schedule adjustments because we must spread that production out over the remainder of the year, which does not necessarily coincide with the need date by each program.

So there will be some program impact within a [55] year; however, in total, over 1988, we feel that we can cover virtually all of that shortfall.

In 1989, we start out, as you can see, with a 40 million pound capacity and, again, with the assumption that Kerr-McGee can reopen, that is the Kerr-McGee capacity.

Our demand, if you recall, if we consider DOD, NASA, if we consider the commercial space, if we consider the European Multiple-Launch System,[56] which is a co-production arrangement—if we consider those requirements, then our requirements approach the 60-million-pound point.

If we go one step further and assume that the new PEPCON facility comes on board, even though they are still optimistic about coming on board early in the year, if we assume they can come on board in mid-89, we will have an area of increased capacity over the demand, and fundamentally, this area of excess capacity at that time will help us make up some of the shortfalls.

We will not be able to cover, as it appears now, all of that shortfall; however, we believe that we will be mitigated to some extent.

If we go one step further and we were also talking—there was also some discussions previously about extra capacity.[57] One of the difficulties that we considered in the course of considering options as to what to expand, what to build,[58] was the demand against capacity. We did not feel we could go out and build tremendous amounts of excess capacity simply because these contractors must stay in business once we set them up.

This, you can see, is our demand curve. If you just consider an 80 percent efficiency factor in general business, you can see that we have been able to match demand and an 80 percent production rate reasonably well while we do have some margin for problems or additional export sales or those kinds of things.

Mr. Roe. If the Colonel would yield for a moment, because we are also fighting time because of pending votes, there's two assumptions that Mr. Rak is making and you are making, I see. And I don't mean this critically.

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[55] Mr. Rak changed "a" to "the."

[56] The Multiple Launch Rocket System is being cooperatively produced in the United States and Europe. It can rapidly fire up to 20 rockets for use as artillery in support of ground forces.

[57] Mr. Rak revised this sentence to read: "If we go one step further, and there were also some discussions previously about extra capacity."

[58] Mr. Rak amended this to read: "* * * as to what to expand and what to build, * * *.

You're making an assumption, one, which Mr. Rak did not speak to, which was the dimension of time and space. We are assuming that the PEPCON people will be back in what period of time—their nine months?

Mr. RAK. One year.

Mr. ROE. All right, one year. That is one.

The second assumption we're making is that the State of Nevada, et al., will allow the Kerr plant to reopen again.

Colonel BUSH. That's correct.

Mr. ROE. The third assumption I hear you making now, and again, not being critical, is that the—to achieve the optimum yield in the interim of the Kerr manufacturing facility, we further have to expand the production capability at that plant.

Colonel BUSH. If I may say—not at that plant, sir.

Mr. ROE. That's where you are not clear.

Colonel BUSH. At a site different from the Kerr-McGee present location; it would be remote from the Henderson area.

Mr. ROE. All right. Let me just clarify that. That's very important.

What I'm trying to say, did I not hear you to say that we were not achieving full capacity at the Kerr plant at this moment? Didn't I hear you say that?

Colonel BUSH. No, sir. That was on May 4th at the time of the explosion.

Mr. ROE. Okay. So are we—you understand where I'm coming from. In other words, if, for the good graces of the people from Henderson and the Governor of that State say, "Well, okay, we understand there is a very serious national situation existing here and with these kinds of safeguards, we will let you go ahead and open up that plant"—we're not going to—what is the yield going to be out of the Kerr plant at that point? Before we build anything new?

Colonel BUSH. We believe we can reach 40 million pounds a year.

Mr. ROE. Is that—what was it producing before? It was only producing 30, wasn't it?

Colonel BUSH. If I may refer back——

Mr. ROE. That's what I want you to do. You're talking about four additional—well, go ahead, I'm sorry.

Colonel BUSH. They were actually producing at a rate of 32——

Mr. ROE. Right.

Colonel BUSH [continuing]. On May 4th. Their nameplate capacity, if you will, is 36——

Mr. ROE. Right.

Colonel BUSH. With some changes, we can go to 40.

Mr. ROE. That's the point I'm trying to make. So, therefore, has this been discussed with the authorities in Nevada and so forth as yet?

Colonel BUSH. Sir, this does not involve any sort of expansion—I think Admiral Truly——

Mr. ROE. I'm not arguing that. I am not even arguing with you. I simply want to get a statement of fact.

In other words—for clarity because I am not as fast as you—the 32 production figure is what they were producing?

Colonel BUSH. That's correct.

Mr. Roe. All right. So we're saying that if we can get the optimum yield out of that plant that we can go to 36, and with a little bit of adjustment of machine equipment, we can go to 40. So one thing we have to take up with the people of Henderson and the State of Nevada—it isn't just the question of our opening the plant; we need their good help now to be able to achieve that optimum yield. Is that—that's all I'm trying to say.

Mr. Rak. It will require, however, no additional construction nor any additional expansion——

Mr. Roe. I'm on the side of the United States and they are, too. I am just simply saying, it's one issue we have to deal with as far as Nevada and as far as the people of Henderson are concerned.

We are going to have your production; are we not?

Mr. Rak. No.

Mr. Roe. We're not going to have any increased production? Aren't we going to go from 32 to 40?

Mr. Rak. All that they know, we will—yes. All that they will need to do will be to use what they call "rejects," and that means that it's equipment—it's product that is not—— [59]

Mr. Roe. I'm not even arguing with you; I'm not even debating with you. I don't disagree with you.

All I am simply trying to say to you is in two weeks' time, we're going to have the governor; we're going to have the members of Congress and we're going to have the representatives from Henderson. I want to be able to talk with them intelligently, and thoroughly understand what we're saying.

So you're saying that whether we open it up at 32 million pounds of production or 40, we're still within the realm, we're in the safety factor, blah, blah, blah.

That is the point I'm trying to make, that's all, just for the record.[60]

Thank you.

[The updated Recovery Status Report follows:]

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[59] Mr. Rak amended his response to read: "We will, yes. All that they will need to do will be to use what they call 'rejects,' and that means that it's equipment—it's product that is not—"

[60] Colonel Bush asked that the following be inserted to complete the record: "The Chairman's summary properly reflects the capacity situation at Kerr-McGee. The prior discussions were prompted by different understandings of the 'capacity' questions. Production at Kerr-McGee is through a continuous chemical process that yields approximately the same amount of product each day. The increase from 32 to 36 million pounds per year is achieved by running the process more days per year. The increase from 36 to 40 million pounds per year is achieved by using oversize particles that would normally be placed back into solution."

AMMONIUM PERCHLORATE
RECOVERY STATUS REPORT

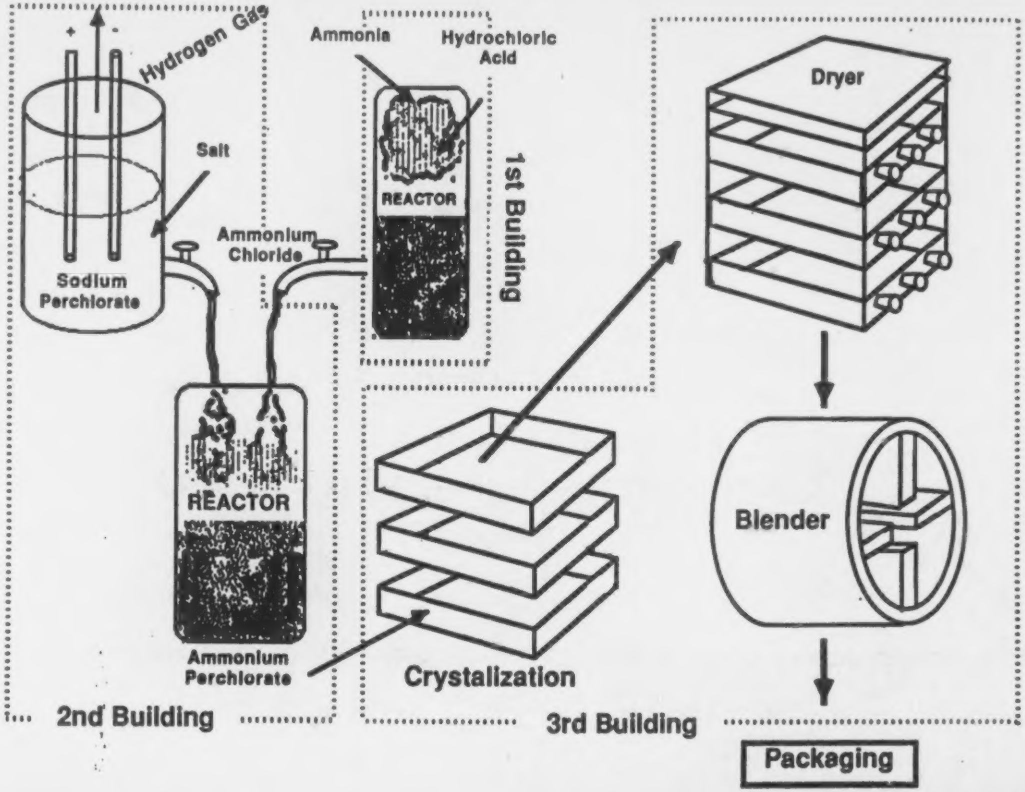
KMCC REOPENING STATUS

- INDEPENDENT SAFETY STUDY COMPLETED
- IDENTIFIED EIGHT ACTIONS REQUIRED BEFORE START-UP
- ACTIONS COMPLETED JUNE 3
- LOCAL FIRE DEPARTMENT IMPOSED NEW CONDITIONS
- REOPENING DATE UNCERTAIN

SITUATION

- AP ESSENTIAL INGREDIENT IN SOLID ROCKET MOTORS
- ONLY TWO U.S. PRODUCERS: KMCC AND PEPCON
- PEPCON FACILITY TOTALLY DESTROYED ON MAY 4
- REPRESENTED APPROXIMATELY ONE-HALF OF U.S. CAPACITY
- KMCC ONLY REMAINING U.S. PRODUCER
- KMCC PRODUCTION LINE CLOSED PENDING COMPLETION OF INDEPENDENT SAFETY STUDY
- WORLDWIDE CAPACITY WENT FROM 30% EXCESS TO 35% DEFICIT
- U.S. CAPACITY FOR DOD/NASA FROM 35% EXCESS TO 25% DEFICIT
- MINIMAL NEAR TERM FOREIGN QUANTITIES AVAILABLE TO U.S.
- NEED TO RESUME PRODUCTION AT KMCC
- NEED TO INCREASE CAPACITY

AMMONIUM PERCHLORATE PRODUCTION PROCESS


Hydrogen Gas
+
-
Salt
Sodium Perchlorate
Ammonia
Hydrochloric Acid
REACTOR
1st Building
Ammonium Chloride
REACTOR
Ammonium Perchlorate
2nd Building
Crystalization
3rd Building
Dryer
Blender
Packaging

AP RECOVERY PLAN

- PHASE I - DETERMINE REQUIREMENTS
- PHASE II - DETERMINE CAPACITY
- PHASE III - ALLOCATE SUPPLIES
- PHASE IV - RESTORE U.S. CAPACITY

AMMONIUM PERCHLORATE (AP) DEMAND
(MILLIONS LBS)

	1988	1989	1990	1991	1992	1993	1994
ARMY	9.3	14.0	11.7	9.1	9.1	9.4	10.3
NAVY	3.7	6.5	5.4	5.1	5.1	5.1	5.1
AIR FORCE	11.0	11.5	16.1	12.9	10.0	10.0	10.0
NASA	8.5	19.8	22.1	24.2	28.0	31.3	29.7
	32.5	51.8	55.3	51.3	52.2	55.8	55.1
COMMERCIAL	3.5	3.7	5.2	.4	1.0	.6	.6
EMLRS	1.8	2.6	5.3	5.3	7.0	5.3	5.3
OTHER EXPORT	1.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL DEMAND	38.8	60.1	67.8	59.0	62.2	63.7	63.0

PROGRAMS USING AMMONIUM PERCHLORATE

NAVY

TRIDENT D-5
TOMAHAWK CRUISE MISSILE
QUICKSTRIKE MINE
SUB LAUNCHED MOBILE MINE
MK 46 TORPEDO
MK 57 BOMBLET
MK 48 ADCAP TORPEDO
MK 6/JATO
MK 23
MK 66
STANDARD MISSILE MOTORS (6)
AEPS (EJECTION SEAT)
ROLLING AIRFRAME MISSILE
SMOKEY SAM
SPARROW
HARPOON
SIDEWINDER
PHOENIX
HARM

ARMY

ATACMS
MLRS
FOTL
HAWK
PATRIOT
STINGER
CHAPPARRAL
155MM HE

NASA

SHUTTLE SRM

MISCELLANEOUS

AIR FORCE

PEACEKEEPER
MINUTEMAN
MAVERICK
TITAN 34D
TITAN IV
DELTA II
- CASTOR 4A
- GEM

AMRAAM
HAVENAP
INERTIAL UPPER STAGE
STAR 37
STAR 48
SENSOR FUSED WEAPON
SRAM II
HYPERVELOCITY MISSILE
ACES II EJECTION SEAT
SMALL ICBM
AGM-130

CAPACITY

ESTIMATED U.S. CAPACITY FOR AMMONIUM PERCHLORATE

(PRE-EXPLOSION)
(MILLION POUNDS PER YEAR (MPY))

	PEPCON	KMCC
ACTUAL PRODUCTION RATE, MAY 4	20	32
MAXIMUM CAPACITY	40	36*

BOTTOM LINE: REMAINING CAPACITY, 36 TO 40

*POTENTIAL EXISTS FOR 40 MPY

ALLOCATE SUPPLIES

- AP ADVISORY GROUP
  - OSD, NASA, ARMY, NAVY, AIR FORCE
  - DEVELOPING ALLOCATION METHODOLOGY
  - EXPECT METHODOLOGY IN THE NEAR FUTURE
- PLANNING TO HAVE REQUIREMENTS/OPERATIONAL INPUT TO ALLOCATION PROCESS

RESTORE
U.S.
CAPACITY

MAJOR CONSIDERATIONS

- SHOULD WE RELY ON THE MARKET PLACE TO ADD THE CAPACITY OR SHOULD THE GOV'T PROVIDE ASSISTANCE?
    - EXTENT AND NATURE OF GOV'T ASSISTANCE
- SHOULD THERE BE MULTIPLE SOURCES?
- SHOULD THE GOV'T HAVE ORGANIC CAPABILITY DUE TO CRITICALITY OF PRODUCT?

ASSUMPTIONS

- KMCC WILL RESUME PRODUCTION IN JUNE AT 40 MPY
- DOD/NASA REQUIREMENTS WILL RISE TO AT LEAST 50 MPY AND REMAIN BETWEEN 50 AND 55 MPY AT LEAST THRU 1994
- DOD/NASA REQUIREMENTS WILL CONTINUE TO BE 85-90% OF U.S. MARKET
- COMMERCIAL SPACE DEMAND WILL CONTINUE TO INCREASE
- U.S. CAPACITY MUST BE ABLE TO MEET FULL DOD/NASA REQUIREMENTS AT A MINIMUM
- SHORTFALL MUST BE MINIMIZED
- ADDITIONAL CAPACITY WILL REQUIRE GOV'T STIMULATION

THEREFORE:

- CAPACITY INCREASE MUST BE INITIATED IMMEDIATELY AND COMPLETED AS SOON AS POSSIBLE TO MINIMIZE SHORTFALL

OPTIONS TO RESTORE U.S. CAPACITY

- EXPAND EXISTING SOURCE CAPACITY TO MEET FULL NEED
  - REMOTE SITE
- ESTABLISH ADDITIONAL SOURCES
  - REBUILD PRIOR SOURCE - REMOTE SITE
  - ESTABLISH NEW SOURCE
- CREATE GOVERNMENT OWNED--CONTRACTOR OPERATED FACILITY
- SOME COMBINATION OF ABOVE OPTIONS

EXPAND EXISTING SOURCE

KMCC PROPOSAL

- RETAIN HENDERSON FACILITY
- BUILD DUPLICATE FACILITY AT REMOTE SITE
- PRIVATELY FINANCED CONTRACTOR CAPITAL INVESTMENT
- SCHEDULE: 24 MONTHS
  - EXPEDITED SCHEDULE: 14-16 MONTHS AT INCREASED COST
- GOV'T ASSISTANCE REQUIRED
  - GUARANTEE RECOVERY OF INVESTMENT OVER FIVE YEARS
  - SURCHARGE ON ALL SALES

REBUILD PRIOR SOURCE

PEPCON PROPOSAL

- DUPLICATE PRODUCTION FACILITY AT REMOTE SITE
- NEW CORPORATE ENTITY
- PRIVATELY FINANCED CONTRACTOR CAPITAL INVESTMENT
- SCHEDULE: PRODUCTION BY JANUARY 1, 1989
- GOV'T ASSISTANCE REQUESTED
  - GUARANTEED PURCHASES: 30 MPY, 15 YEARS
  - INDEMNIFICATION, IF NECESSARY

ESTABLISH ADDITIONAL SOURCES

ESTABLISH NEW SOURCE

- SOLICIT INTEREST
- SELECTION PROCESS MUST BE DEVELOPED
- PRIVATELY FINANCED CONTRACTOR CAPITAL INVESTMENT
- SCHEDULE: 4-6 MONTHS SELECTION/24-48 MONTHS CONSTRUCTION (EST)
- GOVERNMENT ASSISTANCE LIKELY TO BE REQUIRED

OPTIONS

GOCO

- BUILD, OR EXPAND EXISTING, GOCO/ARSENAL
- COMPETE OPERATION
- GOVERNMENT CAPITAL INVESTMENT
- SCHEDULE: 24-48 MONTHS PLUS (EST)

COMBINATION OPTION

- ASSIST PEPCON TO REBUILD A 30 MPY CAPACITY FACILITY AT A REMOTE SITE
- ASSIST KMCC TO ADD A 20 MPY CAPACITY FACILITY AT A REMOTE SITE
- CONSIDER ADDITIONAL FACILITY AS NEEDS BECOME DEFINED
- PRIVATELY FINANCED CONTRACTOR CAPITAL INVESTMENT
- SCHEDULE: 6-24 MONTHS

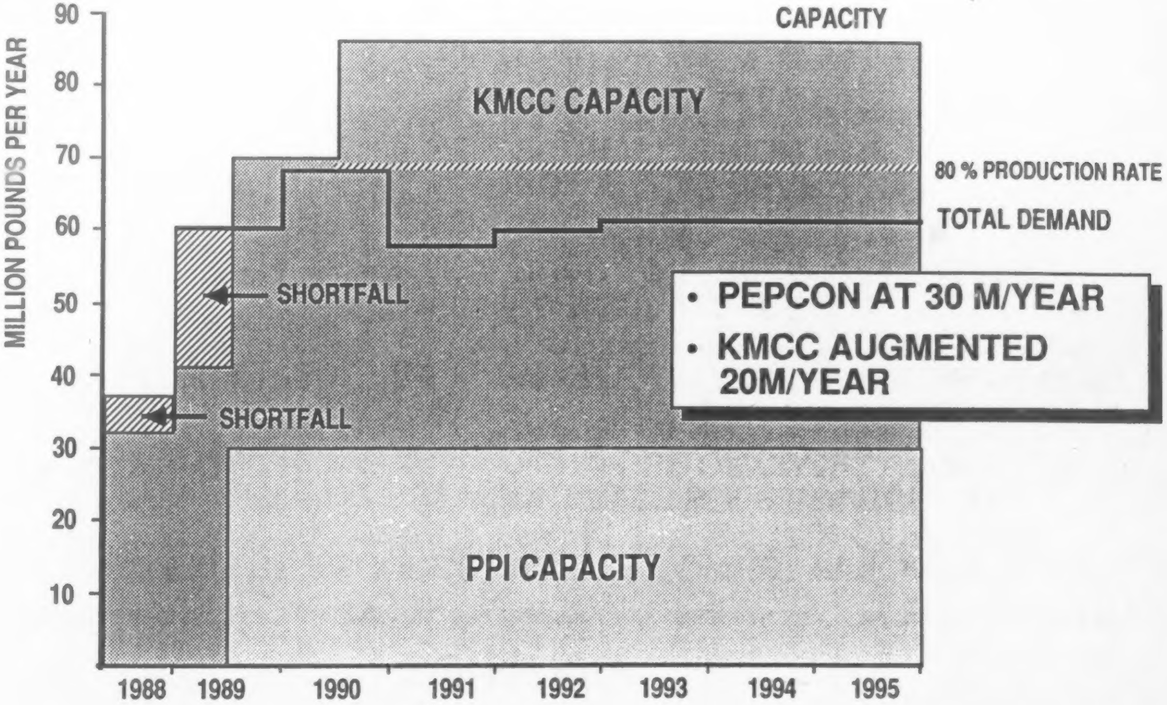
GOVERNMENT ASSISTANCE

- GUARANTEE RECOVERY OF CAPITAL INVESTMENT
- SPREAD OVER PRODUCT PRICE
  - AMORTIZE INVESTMENT OVER PROJECTED SALES FOR 5 - 7 YEARS
  - APPLIED ON SALES TO ALL CUSTOMERS
- PROJECTED SALES COMPUTATION ASSUMES GOV'T PURCHASES OF 20 MPY FROM EACH COMPANY
- IF SALES SHORTFALL, UNAMORTIZED CAPITAL INVESTMENT PAID BY GOV'T AT END OF PERIOD
- NO SALES SHORTFALL ANTICIPATED

CONCLUSIONS

• EXPAND EXISTING SOURCE	VIABLE, LOWEST RISK INDIVIDUAL OPTION TO REGAIN CAPACITY, CREATES SOLE SOURCE, LONG TERM USE OF CURRENT SITE UNCERTAIN
• REBUILD PRIOR SOURCE	VIABLE, LOWEST INVESTMENT COST, HIGHEST RISK INDIVIDUAL OPTION TO REGAIN CAPACITY, MAINTAINS DUAL SOURCE, SHORTEST SCHEDULE
• NEW SOURCE	NOT VIABLE NEAR TERM, EXTENDED SCHEDULE, HIGH RISK
• GOCO	NOT VIABLE, LONGEST SCHEDULE, HIGH RISK
• COMBINATION	VIABLE, LOWEST RISK TO REGAIN CAPACITY, HIGHEST INVESTMENT COST, BEST SCHEDULE, RESTORES CAPACITY IN SHORTEST TIME, COMPETITIVE BASE

CAPACITY VS DEMAND



- PEPCON AT 30 M/YEAR
- KMCC AUGMENTED 20M/YEAR

Mr. Roe. Now, we want to hear next from Mr. Courtney Stadd, our Director, Office of Commercial Space Transportation.

STATEMENT OF COURTNEY A. STADD, DIRECTOR, OFFICE OF COMMERCIAL SPACE TRANSPORTATION, DEPARTMENT OF TRANSPORTATION

Mr. Stadd. Thank you, Mr. Chairman.

I understand the time crunch that you're under, so I will briefly summarize——

Mr. Roe. Your presentation is important, so just summarize it for us, please.

Mr. Stadd. All right, sir.

As this committee is well aware, the commercial launch industry in this country is gearing up for a very busy couple of years, and has reason to be very concerned about the current shortfall of AP.

In just over one year, the U.S. firms have signed launch contracts for 14 contracts worth over $770 million. These launches are scheduled, Mr. Chairman, to commence in the first quarter of 1989 and proceed to the early '90s.

The Department of Transportation, as has been alluded to by the other witnesses, is providing input into discussions regarding the establishment of allocation procedures. We believe economic and foreign policy considerations should be taken into account in any allocative mechanism.

For example, Mr. Chairman, all of the commercial payloads affected by the AP problem are sponsored by international organizations or U.S. allies. DOT estimates launch services to boost these payloads into orbit will bring in over $550 million, a significant contribution to balancing our current trade deficits and, as this committee knows from other testimony I've delivered in the past, we're looking at about 17 other reservations, including many foreign satellite contracts being negotiated by American launch firms.

Mr. Chairman, the commercial space transportation sector supports thousands of jobs, a positive trade balance and is an essential component of the mixed fleet. Based on discussions with that industry, we are concerned that if steps to restore productive capacity are not taken as soon as practicable, the resulting AP shortfall could cause commercial ELV launch postponements or even contractual cancellations. This would seriously jeopardize development of the commercial space sector in achieving the goal of assured access to space, a prime objective of the Congress, a prime objective of the President.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Stadd follows:]

STATEMENT OF

Courtney A. Stadd, Director
Office of Commercial Space Transportation
U.S. Department of Transportation

June 8, 1988

Before the Investigations and Oversight Subcommittee of the House
Committee on Science, Space, and Technology

Mr. Chairman, thank you for this opportunity to discuss the implications of the May 4 accident at Henderson, NV. I share the Committee's concern that commercial launch firms have access to an equitable share of available ammonium perchlorate supplies. The commercial launch industry is playing a vital role in ensuring private sector access to space and contributes to the National Space Policy assured access to space for critical government systems.

Approximately one-half of the U.S. capability to produce ammonium perchlorate (AP) was destroyed early last month. Preliminary industry and government estimates show that the loss of the plant will lead to a shortfall of AP of several million pounds in 1988 and even more in 1989. The Office of Commercial Space Transportation (OCST) has determined that the commercial launch providers will require about 16 million pounds of AP through 1992.

The commercial industry is gearing up for a very busy couple of years and has reason to be concerned about the current shortfall of AP. In just over one year, the U.S. firms have signed launch contracts for 14 payloads worth over 770 million dollars. These launches are scheduled to commence in the first quarter 1989 and proceed through the early 1990s.

The Department is providing input into discussions regarding the establishment of allocation procedures. We believe economic and foreign policy considerations should be taken into account in any allocative mechanism. For example, all of the commercial payloads affected by the AP problem are sponsored by international organizations or U.S. allies. DOT estimates launch services to boost these payloads into orbit will bring in over 550 million dollars; a significant contribution to balancing our current trade deficits.

Mr. Chairman, the commercial space transportation sector supports thousands of jobs, a positive trade balance, and is an essential component of the mixed fleet. Based on discussions with that industry, we are concerned that if steps to restore productive capacity are not taken as soon as practicable, the resulting ammonium perchlorate shortfall could cause commercial ELV launch postponements or even contract cancellations. This would seriously jeopardize development of the commercial space sector and achieving the goal of assured access to space, a prime objective of the nation's space program.

Mr. Roe. Thank you very much. All right. Let me ask you this, is one of the issues—Mr. Rak, you're the coordinator, is one of the issues being considered—as Colonel Bush was explaining the analyses that you are making in your coordinating committee of the multiple needs throughout the different agencies and so forth—there is a relationship, as I would see it, to cutting other production lines in motors and so forth and so on, or at least curtailing those if we're running out of material to be able to launch the rockets?

Do you understand where I'm coming from?

Mr. Rak. There will have to be some adjustments in the schedule, in the production schedule for the rocket motor production.

Mr. Roe. That's what I'm saying, in rocket—when that happens—that's primarily where, what State? I guess all over.

Mr. Rak. Well, I need some help. Certainly there is some in Nevada——

Mr. Roe. Well, let me suggest that this, of course, is our first go-around with you folks and we wanted to get an update. Again, I want to be complimentary in the coordination that you have already put together. But I think it would be helpful to the committee along the line, and as Colonel Bush and et al. begins to express what's happening in different areas, that those post-production lines, other than rockets and so forth, become important to us at this point. That means job layoffs, potential and so forth. Reasonable? So we would be looking to that.

Now, let me just make one other comment and if there are no other questions, we will let you all go for the moment. It puzzles me. If I wanted to be miserable, I would be miserable, but I don't feel that way today.

I don't know why the White House would come back after the second time around—and I don't know whether you are aware of this or not—and today purportedly make the observation that FEMA would not determine this catastrophe to be a disaster and no relief would be available under the FEMA program for Nevada or Henderson.

Are you aware of that issue?

Mr. Rak. I was not.

Mr. Roe. Could I offer a suggestion to you, and you might want to carry it back.

Obviously, the committee, in the line of discussion with you folks—I didn't say questioning—the line of discussion—really understand the order of magnitude of what this is all about.

Here we are going to be calling in—the Governor's coming to testify. Members of Congress from Nevada, et al., the Mayor and other people from those communities affected. We're looking to build good will and we're looking to impress upon the good folks of Henderson that this goes beyond the concern of safety alone; that the defense posture of the nation could be in severe—not jeopardy, but in severe problems at this point.

Now, why in God's name we wouldn't consider them being eligible under the FEMA disaster situation—which gave rise to the word "disaster" in the first place—is beyond my comprehension. I would suggest that it might be good wisdom if you would carry that back to your coordinators that—and we're going to ask why if we have to hold a special hearing on this—that those people shouldn't be given consideration like any other disaster in the nation. As you know, a disaster has to be declared by the White House. As far as—that's where we were coming from earlier today, so you understand that we weren't just being emotional in our presentation.

Having said that, I don't have any further questions. The only thing I would like to leave you with is what our concern is and just let me see if we're correct.

First of all, let me say thank you for coming and testifying. Two, you have been succinct, clear, up-front. There has been no shenanigans in testimony. I think what you've done in getting on the project—the situation immediately and in 30 days' time, having produced this coordination is a credit to all of the agencies involved and certainly it is fair in the direction we're going.

I do think, however, if I could offer a suggestion at this juncture, if we are faced with the problem, as I see it, the Kerr outfit—what was the name of that again? The Kerr-McGee situation becomes the heart of the decision. I think that is number one.

Two, whatever is added to Kerr-McGee and the other company in new production facilities where and ever they may be, but certainly the Kerr-McGee issue is the critical question. When do you think that—is there a meeting—plan to meet with the people in Nevada to try to resolve this or is it going on at this point? Who's handling that? Are you handling that?

Mr. Rak. Kerr-McGee is themselves handling that matter. It is a matter for the local population and for that company. We are, of course, in contact with Kerr-McGee, keeping status on the progress of their attempts to open the facility on a daily basis. We'll also—in fact,[61] I believe Dr. Fletcher has talked to the Governor of Nevada and impressed upon him already the importance to the space program. Our Secretary of the Air Force has communicated with the Governor's office and we will, as I understand it, be presenting to the Governor a much more detailed indication of the program and the effect upon those programs that will be affected by a continued delay in reopening that Kerr-McGee facility.

Mr. Roe. Just to clarify the record, the Federal agencies, your group, et al., are not negotiating with the local community. That's being handled——

Mr. Rak. By Kerr-McGee. We are——

Mr. Roe. By Kerr-McGee, per se. You're only advisors to them at this point.

Mr. Rak. We're in consultation——

Mr. Roe. Consultation.

The Chair recognizes the distinguished gentleman from California, Mr. Packard.

Mr. Packard. Thank you, Mr. Chairman.

Now that we've got DOD people here with NASA people, if it came down to a crunch, how—what is the process of determining priorities of space launches with limited AP available? How do we prioritize between the civilian and the military? Which launches would be going and which would be delayed?

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[61] Mr. Rak requested deletion of "we'll also—in fact."

Mr. RAK. Well, of course, the Defense Production Allocation System already exists which would take over and do that on the basis of certain rating priorities that have already been established for programs. We are presently looking, and indeed, have been meeting and will be meeting the balance of the week in attempting to establish a process for recommending what programs should receive priority if that should be different from what would occur under the normal DPAS system.

Mr. PACKARD. It would appear to me that that priority listing under an emergency or certainly under a major shortfall would have to be reevaluated.

Admiral TRULY. Might I comment, Mr. Packard?

Mr. PACKARD. Please.

Admiral TRULY. To agree with the previous statement, there is not, as was stated, now a formal process for the allocation in place and we're working literally on a day-by-day and hour-by-hour basis to achieve that. In actual fact, what will be done in addition to that, though, is communication between the agencies on various priorities and schedules.

It's not just a rank—order priority list. For example, if NASA got all of its—this is a ridiculous example, but if NASA got all of its 1988 allocation, 100 percent of it, but we got it all on the 31st of December, we would [62]—that would be devastating to the schedule. So it is a negotiation and the first part of that is for the agencies to communicate and cooperate with each other and understand in the context of the allocation legislation that's [63]—or the procedures that are on the books, what the real needs are and that is going on and we're working, I think, very well together to try to achieve——

Mr. ROE. Will the gentleman yield for a second?

Mr. PACKARD. I want a response from Mr. Richards, but yes.

Mr. ROE. I think it's important to make the point, is it not so that the existing Defense Allocation Act leans very heavy to the defense area under the law, under the existing law?

Mr. RICHARDS. I think I could answer that. One other point. The defense priority is now a case in system. It is an administrative or regulatory means to implement allocation policy.[64] The determination of which programs are to receive the available supply of needed materials is the allocation policy that we would implement through directing or distributing the material to meet the critical needs.

The Defense Production Act and the implementing regulations that are administered by Commerce, based on guidance from the interagency group from [65] the National Security Council, is flexible enough to address the needs and to satisfy the needs of both military, NASA and other critical requirements.

Mr. PACKARD. Thank you.

Now, one other question. Is there reasons or is there some justification of slowing down the launch process or any benefit from slowing down the launch process if we know that we're not going to have adequate supplies of fuel—well, let me restate it.

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[62] Admiral Truly requested deletion of "we would."

[63] Admiral Truly requested deletion of "that's."

[64] Mr. Richards amended this to read, "The defense priority system is an administrative or regulatory means to implement allocation policy."

[65] Mr. Richards changed "from" to "chaired by."

You stated earlier, Admiral Truly, that with existing supplies, we could launch up to four current scheduled launches.

Admiral Truly. That's correct.

Mr. Packard. In NASA. I presume there is also—with current supplies, there's a certain amount of launches within the DOD. How many would that be? Do you have any——

Mr. Rak. I do not know offhand. Of course, as we have indicated in the presentation, there are a tremendous number of programs—perhaps over a hundred, 120 programs in the DOD—that will require AP. So we're looking right now—all the programs right now are looking at their scheduling and their needs and program impact and we don't have a statement on that.[66]

Mr. Packard. Is there benefit in knowing that there's only sufficient quantities for a foreseeable period of time to launch the four and to launch whatever is programmed in DOD, to slow that down and stretch it over a period of time rather than launching them all on the current schedule?

Admiral Truly. If I might answer for the shuttle, there very definitely—when we understand what will be available on what schedule, we will have to balance the shuttle program, you know, because we have a plan in place and it is a very complex program with a lot of people in a lot of different areas and it's sort of a chicken/egg situation. You can't—you can't [67] do it until you have the data and you can't have the data until you know what the impacts are.

But, in fact, that's why I said that I think that each agency or each program within an agency, once the allocation direction and process is known, will simply have to come up with the best strategy to make the best of the resources available to it. I know that is the case for the space shuttle.

Mr. Packard. Thank you, Mr. Chairman.

Mr. Roe. The Chair recognizes the gentleman from Florida, Mr. Nelson.

Mr. Nelson. All right. We've only got five minutes. We've got a big vote coming up so try to answer the questions very directly and succinctly.

Mr. Stadd, what kind of financial liability are the commercial launchers liable for if they are not able, under the contracts—for example, Martin-Marietta—to perform by offering a launch to a commercial satellite?

Mr. Stadd. Mr. Nelson, that information—I tried to obtain that information. That information is proprietary, but I can tell you that just based on the information I've gotten, it is fairly substantial.

Mr. Nelson. Is it substantial so that it could call into question the financial viability of the corporation itself?

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[66] Mr. Rak amended this sentence to read: "So for all the programs right now, we are looking at their scheduling, their needs and program impact, and we don't have a statement on that."

[67] Admiral Truly requested "* * *—you can't * * *" be deleted.

Mr. STADD. Mr. Nelson, I think it is substantial enough that it would certainly cause the respective boards of directors to question continuing to be involved, continuing their investments.

Mr. NELSON. In a commercial ELV industry?

Mr. STADD. Yes, sir.

Mr. NELSON. Well, if that's the case, then under existing contracts that Martin-Marietta has signed, then it seems to me that we have got quite a big problem here.

Mr. STADD. Yes, sir.

Mr. NELSON. Let me ask you about—did FEMA, in making their determination that this was not a national emergency—did they consult you all seated at that table?

Mr. RAK. They did not consult me. I'm not aware of any consultation with the Department of Defense, although they may have at some other level.

Mr. NELSON. Does that not seem strange to you personally?

Mr. RAK. I think that's FEMA's responsibility and there are probably procedures which have been established which indicate how they are to make those determinations.

Admiral TRULY. Mr. Chairman, might I respond for an answer? We have been quite aware that FEMA has been involved and was heading for a determination but until this afternoon, I was not aware of this event.

We have not—they have not consulted with us, nor do I think it's—considering the responsibilities—would have been formally appropriate, but we—we have known that they have been involved and have been aware of their work.[68]

Mr. NELSON. Have they consulted with anybody in NASA? FEMA?

Admiral TRULY. I can't speak to——

Mr. NELSON. Admiral Evans is shaking his head no back there.

Admiral TRULY. I don't know, but by consulting, they've[69]—we've talked to them and know that they're working. If you mean by "consulting," asking our opinion for their responsibilities and how they should come down, not to my knowledge.

Mr. NELSON. Well, let me yield to the chairman, but I would only ask——

Mr. ROE. I'm sorry we don't have more time——

Mr. NELSON [continuing]. As I yield to the chairman, how in the world can FEMA make a determination on whether or not there's a national emergency if they don't consult the very people who determine whether or not the national interest is at stake, Mr. Chairman?

Mr. RICHARDS. Mr. Chairman, I believe that FEMA is a member of the Interagency Task Force, chaired by the National Security——

Mr. ROE. If the gentleman would yield, you know, from the word we're getting back—you have a real tough job ahead of you because you have to convince Nevada—and we're getting the word back from there that there's libraries damaged; there's municipal buildings that have been damaged and so forth and so on.

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[68] Admiral Truly amended this sentence to read: "They have not consulted with us, nor do I think its—considering the responsibilities—would have been formally appropriate, but we have known that they have been involved and have been aware of their work."

[69] Admiral Truly requested deletion of "they've."

There were, you know, two people killed and—what was it, 60-some-odd people hurt and all kinds of damage done around. This is extraordinary to me that here we're looking for the cooperation—which we need desperately now, in my judgment—with the good authorities of Nevada and then we're coming back and saying, "Too bad, you know, rebuild your own library, rebuild your own school. We want to get the most production we can get out of this facility and so forth, but we're not going to do anything to help you." That's really what's before us.

Now, come next week, two weeks from now—and I'm on your side—and there's two—two weeks from today, we're going to have them in here. What are they going to tell us? Do we hold a hearing in Nevada and say, "Are the people of Nevada being properly handled? Are they being treated fairly?"

My God, in my place when we have a flood, we call upon FEMA and somebody gets hurt or property is ruined or whatever, it's eligible under the law. I can't understand this one. This one, I can't understand.

Mr. NELSON. Mr. Chairman——

Mr. ROE. I know I have the gentleman's time.

Mr. NELSON. You and I have got to go there to vote on Claude Pepper's bill and I just want to make this point.

In the enlightened self-interest of NASA, let me point out what could happen. I have just perused these charts.

In 1989, there's a total demand of 48 million pounds. The requirement estimated for shuttle is about 19 million pounds. There's an MLRS[70] that probably is lower on a priority, a certain system, I understand, in defense that may be cut out.

But what I'm trying to say to NASA is that if you got down to really the rock-bottom, the place that they're going to look at, say, "Where can we cut it?" is going to come out of the space shuttle because of the big demand.

In your enlightened self-interest, I think that you guys better start getting really concerned about this situation from the national interests.

Mr. ROE. The good gentleman from Florida and I have to vote. If we don't, we won't be back here next year.

All that notwithstanding, we want to thank you very much for substantive response. We're going to be calling you back. We're going to be looking to much more detail on the allocation aspect of it and we do hope you would talk to somebody down on the FEMA issue and ask them if they couldn't be cooperative with the team to be able to get this thing reopened.

The committee stands adjourned.

Mr. RAK. Thank you, Mr. Chairman.

Admiral TRULY. Thank you, Mr. Chairman.

[Whereupon, at 4:50 p.m., the subcommittee was adjourned, to reconvene subject to the call of the Chair.]

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[70] Multiple Launch Rocket System.

EXPLOSION AT THE PACIFIC ENGINEERING AMMONIUM PERCHLORATE PLANT: LOCAL IMPACT AND RECOVERY ACTIVITIES

FRIDAY, JUNE 24, 1988

House of Representatives,
Committee on Science, Space, and Technology,
Subcommittee on Investigations and Oversight,
Henderson, NV.

The subcommittee met, pursuant to notice, at 9 a.m., in the Henderson Convention Center, 200 Water Street, Henderson, Nevada; the Honorable Robert A. Roe (chairman of the subcommittee) presiding.

Mr. Roe. Good morning, ladies and gentlemen. The subcommittee will come to order.

We have come here today from Washington to show our concern for the town and the people of Henderson, Nevada. For years, Henderson has supported two plants that produce the nation's entire supply of ammonium perchlorate—an oxidizer, as you know, necessary to fuel all solid rocket motors used by the military and the space program. On May 4th, one of those plants exploded—killing two people, injuring hundreds and causing millions of dollars worth of damage.

We are here to learn firsthand about the damage that flowed from that explosion and about the needs of this community. We are disappointed that, at least at this juncture, that one of our branches of our government has not provided the assistance that we believe should be considered seriously for the city and the residents of the City of Henderson.

Next weekend this nation, as you know, will celebrate our 212th birthday. And Independence Day should remind us all of the responsibility America's leadership in the free world places on our citizens. We strive to provide a national defense second to none, a space program to reach the stars, an economic system that benefits all citizens, and a society characterized by justice and fair play. Our goals are national goals, as well as they are of our individual citizens. Our needs are also national needs. But our efforts are, and must be, community efforts. This nation is great because the efforts of individual communities make it so. Henderson, Nevada, is one such community.

We believe it is possible to reach our national goals without losing sight of the needs of our communities. The Committee on Science, Space, and Technology is not concerned with only rockets, machines and laboratories, but we care about the people who make the rockets and the rocket fuel, the people who wear the lab coats, the people who run the machines and we understand that the success of our scientific efforts will be judged by the well-being of our people.

Our hearing today is intended to provide a clear picture of what happened in Henderson on May 4th and the effect that event has had on the local and national level. We have invited local citizens to describe the impact of the explosion through their eyes. Federal officials from NASA and the Defense Department are here to explain their involvement in the recovery effort. A representative from the Federal Emergency Management Administration [FEMA] is here to discuss FEMA's evaluation of Henderson's plea for Federal assistance. Officials from both plants will discuss the issues to be considered in restoring this nation's capacity to make this all-important fuel for our rocket systems.

I welcome all of our witnesses here today and, on the Subcommittee's behalf, I wish to thank them in advance for their cooperation and hard work. I also wish to thank my fellow Members of Congress for coming to Henderson today to discuss this important issue.

And I will move to extend or revise my remarks at this time. Before I call on our ranking member, I would like to have unanimous consent to permit coverage of this hearing by electronic and photographic media. Hearing no objection, it is so ordered.

Now, let me introduce to the ladies and gentlemen—I want to introduce the members of the community that are here and then I want to welcome the Governor and then I will defer to the distinguished gentleman from Wisconsin [Mr. Sensenbrenner].

We have with us members of the committee, Representative Harold Volkmer from Missouri to my right over here. Mr. Jim Sensenbrenner, to my immediate left, who is from the great State of Wisconsin. Mr. Ernest Konnyu from the State of California and we have Jim Bilbray who is your congressman from the great State of Nevada, who is journeying with us. Jim, over here to the right. And we have Mr. Jack Buechner who is the distinguished representative from the great State of Missouri.

We want to thank the Governor, Governor Bryan and Lieutenant Governor Bob Miller, who are here—who will testify. We certainly want to thank the Mayor, and the hospitality we have all received from all of the people of the community and all those participating.

The Chair now defers to the distinguished gentleman from Wisconsin who is our ranking member, in reference to his opening statement.

[The prepared opening statment of Mr. Roe follows:]

OPENING STATEMENT BY THE HONORABLE

ROBERT. A. ROE

CHAIRMAN, SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

HEARING ON THE LOCAL IMPACT OF THE PEPCON EXPLOSION
JUNE 24, 1988
HENDERSON, NEVADA

GOOD MORNING LADIES AND GENTLEMEN. THE SUBCOMMITTEE WILL COME TO ORDER.

WE HAVE COME HERE TODAY TO SHOW OUR CONCERN FOR THE TOWN OF HENDERSON. FOR YEARS, HENDERSON HAS SUPPORTED TWO PLANTS THAT PRODUCE THE NATION'S ENTIRE SUPPLY OF AMMONIUM PERCHLORATE -- AN OXIDIZER NECESSARY TO FUEL ALL SOLID ROCKET MOTORS USED BY THE MILITARY AND THE SPACE PROGRAM. ON MAY 4TH, ONE OF THOSE PLANTS EXPLODED KILLING TWO PEOPLE, INJURING HUNDREDS AND CAUSING MILLIONS OF DOLLARS OF DAMAGE.

WE ARE HERE TO LEARN FIRST HAND ABOUT THE DAMAGE THAT FLOWED FROM THAT EXPLOSION AND ABOUT THE NEEDS OF THIS COMMUNITY. WE ARE DISAPPOINTED THAT ONE OF OUR BRANCHES OF GOVERNMENT HAS DECIDED NOT TO PROVIDE ASSISTANCE TO HENDERSON AND WE HAVE ASKED THEM HERE TODAY TO EXPLAIN THAT DECISION.

NEXT WEEKEND THIS NATION WILL CELEBRATE THE 212TH BIRTHDAY. INDEPENDENCE DAY SHOULD REMIND US ALL OF THE RESPONSIBILITY AMERICA'S LEADERSHIP IN THE

FREE WORLD PLACES ON HER CITIZENS. WE STRIVE TO PROVIDE A NATIONAL DEFENSE SECOND TO NONE, A SPACE PROGRAM TO REACH THE STARS, AN ECONOMIC SYSTEM THAT BENEFITS ALL CITIZENS, AND A SOCIETY CHARACTERIZED BY JUSTICE AND FAIR PLAY. OUR GOALS ARE NATIONAL GOALS. OUR NEEDS ARE NATIONAL NEEDS. BUT OUR EFFORTS ARE, AND MUST BE, COMMUNITY EFFORTS. THIS NATION IS GREAT BECAUSE THE EFFORTS OF INDIVIDUAL COMMUNITIES MAKE IT SO. HENDERSON, NEVADA IS ONE SUCH COMMUNITY.

WE BELIEVE IT IS POSSIBLE TO REACH OUR NATIONAL GOALS WITHOUT LOSING SIGHT OF THE NEEDS OF OUR COMMUNITIES. THE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY IS NOT CONCERNED WITH ONLY ROCKETS, MACHINES AND LABORATORIES. WE CARE ABOUT THE PEOPLE WHO MAKE THE ROCKETS AND THE ROCKET FUEL, THE PEOPLE WHO WEAR THE LAB COATS, AND THE PEOPLE WHO RUN THE MACHINES. WE UNDERSTAND THAT THE SUCCESS OF OUR SCIENTIFIC EFFORTS WILL BE JUDGED BY THE WELL-BEING OF OUR PEOPLE.

OUR HEARING TODAY IS INTENDED TO PROVIDE A CLEAR PICTURE OF WHAT HAPPENED IN HENDERSON ON MAY 4TH AND THE EFFECT THAT EVENT HAS HAD ON THE LOCAL AND NATIONAL LEVEL. WE HAVE INVITED LOCAL CITIZENS TO DESCRIBE THE IMPACT OF THE EXPLOSION THROUGH THEIR EYES. FEDERAL OFFICIALS FROM NASA AND THE DEFENSE DEPARTMENT ARE HERE TO EXPLAIN THEIR INVOLVEMENT IN THE RECOVERY EFFORT. A REPRESENTATIVE FROM THE FEDERAL EMERGENCY MANAGEMENT ADMINISTRATION IS HERE TO DISCUSS FEMA'S EVALUATION OF HENDERSON'S PLEA FOR FEDERAL ASSISTANCE. OFFICIALS FROM BOTH PLANTS ARE TO DISCUSS THE ISSUES TO BE CONSIDERED IN RESTORING THIS NATION'S CAPACITY TO MAKE THIS ALL IMPORTANT FUEL.

I WELCOME ALL OF OUR WITNESSES HERE TODAY AND, ON THE SUBCOMMITTEE'S

BEHALF, WISH TO THANK THEM IN ADVANCE FOR THEIR COOPERATION AND HARD WORK. I ALSO WISH TO THANK MY FELLOW MEMBERS OF CONGRESS FOR COMING TO HENDERSON TODAY TO DISCUSS THIS IMPORTANT ISSUE. WE DO NOT CLAIM TO HAVE THE ANSWERS TO ALL THE PROBLEMS THAT WILL BE DISCUSSED TODAY, BUT WE BELIEVE THAT FULL, FAIR AND PUBLIC DISCUSSION OF THOSE PROBLEMS WILL BENEFIT EVERYONE CONCERNED AND LEAD TO THE SOLUTIONS WE ALL SEEK.

AT THIS TIME WITHOUT OBJECTION, I ASK UNANIMOUS CONSENT TO PERMIT COVERAGE OF THIS HEARING BY ELECTRONIC AND PHOTOGRAPHIC MEDIA. HEARING NO OBJECTION, IT IS SO ORDERED.

I NOW RECOGNIZE _______________ FOR HIS OPENING REMARKS.

Mr. SENSENBRENNER. Thank you very much, Mr. Chairman. I certainly would like to echo the remarks of the gentleman from New Jersey in thanking the people of Henderson, Governor Bryan and state officials for the hospitality that they have given to us and their openness in sharing information relative to this problem.

I think that there are two issues that we have to address. The first issue is how to rebuild the ammonium perchlorate manufacturing capacity that was lost when the PEPCON plant blew up. And that is something we are going to have to decide in Washington. But let me say that based upon the material that I have reviewed, I think it would be ill-advised for the Federal Government to enter into any arrangements with PEPCON to rebuild that plant and to go back into the business of manufacturing ammonium perchlorate.

I say so because we all know that PEPCON is going to be subject to a host of liability suits as a result of what happened on May 4th. And I am afraid that if government money went in to rebuild that plant that would be subjected to the lawsuits and the possible bankruptcy. And it seems to me that we ought to be looking elsewhere to other corporations to rebuild the ammonium perchlorate manufacturing capacity, whether it is existing corporations or whether it is in a corporation that is not doing that kind of business now.

The second issue is the issue of federal compensation for the damage that was caused as a result of the blast. Federal compensation is not intended to get insurance companies off the hook. People pay premiums for insurance companies and those insurance companies should pay all valid claims and pay them promptly. And I think the major issue that we have been wrestling around with in trying to get FEMA to get involved is the extent of the insurance coverage that has insured for the material losses that have been caused as a result of the May 4th blast.

And I think one of the things that the committee wants to find out today is the extent of the insurance coverage. Senator Hecht talked to me on the phone the day before yesterday, before I left Washington. He would like to be here today, but his daughter is getting married over the weekend and that, of course, has been on the agenda for a long time and I am sure that we all can understand why he isn't here since his daughter is getting married. But he did give me a letter that I would like to read into the record at this time.

It is dated June 24th and addressed to me:

DEAR JIM: I hope you will convey my appreciation to the chairman and members of the Subcommittee on Investigations and Oversight for holding this hearing today into the PEPCON disaster. While I would like to be in Henderson, personally, to discuss this situation with the subcommittee, the marriage of my daughter, Saturday, in Washington, precludes my attendance.

As you by now have seen from your tour of the disaster site and from the testimony you will receive, the City of Henderson was severely impacted by the PEPCON blast. As I expressed to President Reagan the morning after, every effort must be made to assist the people of Henderson.

To this end, I saw the second FEMA review before a formal decision on disaster assistance was rendered. This was to insure that with the massive amount of damage covered by insurance no one was left behind.

I am hopeful that the President and FEMA will have a change of heart and that new information contained in the appeal will convince FEMA of the need for federal help in this case. While we await FEMA's new review, which is standard under the appeal process, I would like to emphasize that the business of assisting the people of Henderson goes on.

For the subcommittee's information, just last Friday and Saturday, I opened a temporary office in Henderson. I did this to enable anyone who is not covered by insurance, anyone who is not being helped or cannot help themselves, to let me know personally.

I can report to the committee that in those two days, 51 people took this opportunity to visit with me. Upon my return to Washington, I forwarded this information to FEMA for their review during this appeal period. In the interim, I want to state that my office is working to help these individuals on a case-by-case basis while we await FEMA's decision.

Moreover, I am encouraging anyone else who is in urgent need of assistance and did not or could not visit with me last week to call my Las Vegas office as soon as possible. I hope you and the subcommittee will find the discussion during this hearing informative and useful as we deal with the problems that face the people of Henderson.

I will continue my effort to help as I have stated to Governor Bryan and the entire Nevada congressional delegation. I stand ready to work hand-in-hand to find solutions.

Again, I am sorry I cannot be in attendance today.

Sincerely,

CHIC HECHT,
United States Senator.

Senator Hecht did send his legislative director, Dennis Herobik, to be with us, today. And I am wondering if, Dennis, you could stand up so that people can see who you are if they have any questions.

Thank you very much, Mr. Chairman.

[The letter from Senator Hecht follows:]

C. HECHT
NEVADA

COMMITTEES:
BANKING, HOUSING, AND URBAN AFFAIRS
ENERGY AND NATURAL RESOURCES
SELECT COMMITTEE ON INTELLIGENCE

United States Senate
WASHINGTON, DC 20510

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June 24, 1988

The Honorable F. James Sensenbrenner, Jr.
Subcommittee on Investigations and Oversight
Committee on Science, Space, and Technology
U.S. House of Representatives
Washington, D.C. 20515

Dear Jim:

I hope you will convey my appreciation to the Chairman and members of the Subcommittee on Investigations and Oversight for holding this hearing today into the PEPCON disaster. While I would like to be in Henderson personally to discuss this situation with the Subcommittee, the marriage of my daughter, Saturday in Washington, precludes my attendance.

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I hope you and the Subcommittee will find the discussion during this hearing informative and useful as we deal with the problems that face the people of Henderson. I will continue my efforts to help, and as I have stated to Governor Bryan and the entire Nevada Congressional delegation, I stand ready to work hand in hand to find solutions. Again, I am sorry I cannot be in attendance today.

Sincerely,

Chic Hecht

Chic Hecht

Mr. ROE. I thank the gentleman from Wisconsin.

Now, ladies and gentlemen, before we call the first witness, I would like to set some ground rules. We have journeyed a long way to join with you. And, Mayor, we thank you again for being here and your great hospitality and the help we have received from your folks.

We are here to ascertain the facts. We all came all the way out here to be able to talk directly to the people that are affected. These hearings have a tendency, once in a while, to get a little bit emotional, as we understand. We got through that. But, remember, we are here to listen. We are going to be here all day. We have a structured set of witnesses at the beginning and then we are going to be opening up for additional citizens to be able to present their views that may not be on the witness list. If you would be kind enough, if you want to do that, Ms. Kathy Guilfoy over on my right, just go up there and sign in and we will hear you as best we can later in the day. So, that would cover that.

We have time constraints, so, please try to make your points concisely and to the point so that we can all understand. Speak up, do not be afraid. We do not bite and we know that the people of Henderson do not bite, at least at this point.

The Chair would like to make, also, the following observations to all that are here. We did hold a hearing, as you know, in Washington. We have had the DOD—Department of Defense people, the NASA people have testified and a host of other people. Many of them will be testifying today to bring us up to date as we see the issue.

The Chair sees two specific relationships that we want to develop. One, and I believe it in part was mentioned by the distinguished gentleman from Wisconsin, is the exposure of the people to losses and damages and that ranges from somewhere in FEMA's initial presentation of somewhere around three million dollars. And, now, as I understand in different reviews made by the citizens and other people, to 23 million dollars. Obviously, someplace, somewhere in between is some kind of true factors. We have got to get to that particular issue in due course.

The second point that the Chair sees and I am sure the committee sees, too, is what part or in what role does this committee, being the authorizing committee, play in the determinations with NASA and DOD in the rehabilitation, if you like, of our ammonium perchlorate plant. And what we may be doing in rebuilding additional facilities in that direction, keeping in mind our concern for the people of this great city and state as it relates to the jobs that are here, as it relates to the economic dynamics and the effects upon this state and the effects upon the people in the programs of the United States of America. And that is the direction we are here. We are here not to dictate. We are not here to give a Sermon on the Mount. We are here to listen and to share with you and see if we can come to communion in a general decisionmaking process that makes sense and is fair play to everybody that is involved.

Having said that, the Chair now would recognize our first witness, your distinguished Congressman, Mr. Bilbray, representing Nevada and representing this area. So, Jim, the Chair recognizes you for your statement and your observations to report to the committee. The gentleman from Nevada.

STATEMENT OF HON. JAMES H. BILBRAY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

Mr. BILBRAY. Thank you. First of all, I would like to on behalf of Senator Reid—Senator Reid also is in session in Congress right now. The Senate is meeting at the present time. He is in session and would like to be here, especially because of his long contacts with the people in Henderson where he served as student body president at Basic High. His chief aide, both Don Wilson and Ray Martinez are both graduates of Basic High School here in Henderson. He has given me a letter which I would like to submit to the committee to be added to the record as his testimony today on behalf of the citizens of Henderson. He has great concern and we are reporting back to him every few hours how this hearing is going from my own aides that are here to Senator Reid.

Mr. ROE. Is the gentleman submitting the letter for the record at this point?

Mr. BILBRAY. Yes, I would.

Mr. ROE. No objection. So ordered.

[The prepared statement of Senator Reid follows:]

HARRY REID
NEVADA

COMMITTEES:
APPROPRIATIONS
ENVIRONMENT AND PUBLIC WORKS
SPECIAL COMMITTEE ON AGING

United States Senate
WASHINGTON, DC 20510

June 22, 1988

Honorable Robert A. Roe
Chairman
Subcommittee on Investigations and Oversight
House Committee on Science, Space and Technology
2321 Rayburn House Office Building
Washington, D.C. 20515-6301

Dear Chairman Roe:

I want to commend you and the members of the House Investigations and Oversight Subcommittee for calling this hearing to examine several areas of concern following the May 4 explosion of the Pacific Engineering and Production Company (PEPCON) in Henderson, Nevada. I am especially grateful to you for bringing the Science, Space and Technology Committee to Nevada, as I served on the Committee during my term in the House of Representatives.

The national security implications of the explosion warrant our attention. PEPCON manufactured ammonium perchlorate, an essential ingredient in solid rocket propellant used on strategic and tactical missiles, as well as on the space shuttle. The plant explosion destroyed approximately one-half of the U.S. production capacity for ammonium perchlorate. Kerr-McGee Chemical Company is the only other domestic source of ammonium perchlorate and is located approximately one mile from the PEPCON chemical plant.

Notwithstanding the national security implications of the explosion, this hearing is extremely important to the people of Henderson. The explosion resulted in the deaths of 2 people, more than 350 injuries and property damage of more than $74 million. As you know, the efforts of Nevada officials to receive federal aid to assist the community in its recovery process have not been successful. Residents of Southern Nevada are grateful the federal government has agreed to help rebuild the PEPCON plant. However, there is widespread disappointment that the same government has denied disaster relief. It is not surprising, Mr. Chairman, that devastation following the blast, coupled with the denial of disaster assistance, has had a negative impact on the community.

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Page 2

Information gathered today will help rebuild not only the PEPCON plant, but the Henderson community as a whole. Thank you again for your kind attention.

With all best wishes,

Sincerely,

Harry Reid

HARRY REID
United States Senator

HMR:sam

Mr. Bilbray. I would like to commend Chairman Roe for calling this hearing today to examine and review the response to the May 4, 1988, explosion at the Pacific Engineering and Production Company.

I am pleased to see the deep concern of the members of the committee for the people of Henderson. I believe that we have a friend in Chairman Roe and that he wants to help the citizens of Southern Nevada who have suffered immensely.

On May 4, 1988, the Southern Nevada community of Henderson suffered a series of fires and explosions at a rocket fuel plant which killed two and left more than 350 injured.

The devastation wrought extensive property damage as far as twelve miles from the site of the explosion in Las Vegas. And I even heard today as far as twenty miles. And the effects of a five-square-mile toxic cloud created by the fires was felt by the residents of the towns of Moapa, Logandale, and Overton, Nevada.

Schools were closed and hundreds of residents were evacuated. One report indicated a ring of destruction eight miles wide. The blast and fires destroyed the Pacific Engineering and Production Company as well as the Kidd Company Marshmallow Factory contiguous to the rocket fuel plant.

The shock waves from the explosions, which registered 3.5 on the Richter Scale at the California Institute of Technology in Pasadena, California, overturned automobiles, knocked pedestrians to the ground and created extensive property damage in the cities of Henderson and Las Vegas. Residents who have contacted my office have compared the impact of the explosions to the aboveground detonations of nuclear weapons at the Nevada Test Site of the 1950's which they also witnessed. The damage caused by this explosion is estimated to be in excess of 73 million dollars.

Upon hearing of the disaster, the appropriate Federal officials arrived in Henderson to tour the blast. FEMA began working with state and local officials in Henderson to make damage estimates for possible Federal disaster relief a day after the explosions at the PEPCON chemical plant.

Since that tragic blast on May 4th, we have had to sit idly by while the Federal bureaucracy and politics delay a decision that is a matter of immense importance to the residents of the Las Vegas Valley. Thirty-four days later, a faceless bureaucrat in Washington said "no" to the citizens of Henderson.

Mr. Chairman and members of the subcommittee, we acknowledge as Nevadans that ammonium perchlorate is essential to the nation's defense efforts, our space program, and the commercial launch industry. But Nevadans expect the Federal Government to treat us just as fairly. As Chairman Roe said in his letter appealing the decision by the President to deny assistance to Henderson, "A community that supports two of the most important plants in the country has suffered misfortune as a result of that support and should be treated with compassion and concern."

I hope that as a result of this hearing that Federal Governmental assistance can be provided to aid the citizens of Henderson.

And, again, I would like to thank the representatives of the City of Henderson, Clark County, the Governor and the Lieutenant Governor and, certainly, this committee which many of these gentlemen—this is an election year, and they are from both sides of the aisle. They are Republicans and Democrats that are here today to find out the facts and see what they can do to assist us. And I know many of them would like to be in their districts campaigning for their own re-elections right now. And I thank them for coming out here and, hopefully, this hearing will be the first step to resolving a problem that at this point is not even close to being resolved. Thank you.

[The prepared statement of Mr. Bilbray follows:]

OPENING STATEMENT BY REP. JAMES H. BILBRAY
SUBCOMMITTEE ON INVESTIGATIONS & OVERSIGHT
HOUSE SCIENCE, SPACE & TECHNOLOGY COMMITTEE
JUNE 24, 1988
HENDERSON CONVENTION CENTER
HENDERSON, NEVADA

I WANT TO COMMEND CHAIRMAN ROE FOR CALLING THIS HEARING TODAY TO EXAMINE AND REVIEW THE RESPONSE TO THE MAY 4, 1988 EXPLOSION AT THE PACIFIC ENGINEERING & PRODUCTION COMPANY (PEPCON).

I AM PLEASED TO SEE THE DEEP CONCERN OF THE MEMBERS OF THE COMMITTEE FOR THE PEOPLE OF HENDERSON. I BELIEVE THAT WE HAVE A FRIEND IN CHAIRMAN ROE AND THAT HE WANTS TO HELP THE CITIZENS OF SOUTHERN NEVADA WHO HAVE SUFFERED IMMENSELY.

ON MAY 4, 1988, THE SOUTHERN NEVADA COMMUNITY OF HENDERSON SUFFERED A SERIES OF FIRES AND EXPLOSIONS AT A ROCKET FUEL PLANT WHICH KILLED TWO AND LEFT MORE THAN 350 INJURED.

THE DEVASTATION WROUGHT EXTENSIVE PROPERTY DAMAGE AS FAR AS TWELVE MILES FROM THE SITE OF THE EXPLOSION IN LAS VEGAS, AND THE EFFECTS OF A FIVE SQUARE MILE TOXIC CLOUD CREATED BY THE FIRES WAS FELT BY THE RESIDENTS OF THE TOWNS OF MOAPA, LOGANDALE, AND OVERTON, NEVADA.

SCHOOLS WERE CLOSED AND HUNDREDS OF RESIDENTS WERE EVACUATED. ONE REPORT INDICATED A RING OF DESTRUCTION EIGHT MILES WIDE.

THE BLAST AND FIRES DESTROYED THE PACIFIC ENGINEERING AND PRODUCTION COMPANY (PEPCON) AS WELL AS THE KIDD AND COMPANY MARSHMALLOW FACTORY CONTIGUOUS TO THE ROCKET FUEL PLANT.

THE SHOCK WAVES FROM THE EXPLOSIONS, WHICH REGISTERED 3.5 ON THE RICHTER SCALE AT THE CALIFORNIA INSTITUTE OF TECHNOLOGY IN PASADENA, CALIFORNIA, OVERTURNED AUTOMOBILES, KNOCKED PEDESTRIANS TO THE GROUND AND CREATED EXTENSIVE PROPERTY DAMAGE IN THE CITIES OF HENDERSON AND LAS VEGAS. RESIDENTS WHO HAVE CONTACTED MY OFFICE HAVE COMPARED THE IMPACT OF THE EXPLOSIONS TO THE ABOVE-GROUND DETONATIONS OF NUCLEAR WEAPONS AT THE NEVADA TEST SITE OF THE 1950'S WHICH THEY ALSO WITNESSED.

THE DAMAGE CAUSED BY THIS EXPLOSION IS ESTIMATED TO BE IN EXCESS OF 73 MILLION DOLLARS.

UPON HEARING OF THE DISASTER, THE APPROPRIATE FEDERAL OFFICIALS ARRIVED IN HENDERSON TO TOUR THE BLAST. FEMA BEGAN WORKING WITH STATE AND LOCAL OFFICIALS IN HENDERSON TO MAKE DAMAGE ESTIMATES FOR POSSIBLE FEDERAL DISASTER RELIEF A DAY AFTER EXPLOSIONS AT THE PEPCON CHEMICAL PLANT.

SINCE THAT TRAGIC BLAST ON MAY 4TH, WE HAD TO SIT IDLY BY WHILE THE FEDERAL BUREAUCRACY AND POLITICS DELAY A DECISION THAT IS A MATTER OF IMMENSE IMPORTANCE TO THE RESIDENTS OF THE LAS VEGAS VALLEY.

THIRTY FOUR DAYS LATER, A FACELESS BUREAUCRAT IN WASHINGTON JUST SAID **NO** TO THE CITIZENS OF HENDERSON.

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, WE ACKNOWLEDGE AS NEVADANS THAT AMMONIUM PERCHLORATE IS ESSENTIAL TO THE NATION'S DEFENSE EFFORTS, OUR SPACE PROGRAM, AND THE COMMERCIAL LAUNCH INDUSTRY. BUT NEVADANS EXPECT THE FEDERAL GOVERNMENT TO TREAT US JUST AS FAIRLY. AS CHAIRMAN ROE SAID IN HIS LETTER APPEALING THE DECISION BY THE PRESIDENT TO DENY ASSISTANCE TO HENDERSON, "A COMMUNITY THAT SUPPORTS TWO

OF THE MOST IMPORTANT PLANTS IN THE COUNTRY HAS SUFFERED MISFORTUNE AS THE RESULT OF THAT SUPPORT AND SHOULD BE TREATED WITH COMPASSION AND CONCERN."

I HOPE THAT AS A RESULT OF THIS HEARING, FEDERAL GOVERNMENTAL ASSISTANCE CAN BE PROVIDED TO AID THE CITIZENS OF HENDERSON.

Mr. **Roe**. I thank the gentleman for his testimony.

Is there any questions that any of the members would like to portend to Mr. Bilbray? Does anyone have any questions? The gentleman from Missouri.

Mr. **Buechner**. Jim, have you had any people come to your office seeking assistance, say, with SBA or anybody besides FEMA that you have been unable to get assistance for?

Mr **Bilbray**. At this point, we have had many inquiries and many people that want both SBA and FEMA and other government agencies' help. And at this point, until we get through this initial hurdle of determining whether or not this is a disaster area, we have not been able to help them to any extent at all.

Mr. **Buechner**. Are there any state agencies that your office has been helping put the people in contact with?

Mr. **Bilbray**. We have generally not referred them to state agencies, because at this point we have not had the ability through the state to be able to help them very much. We are a small state and even though we have a roughly 580 million dollar a year budget, we do not have a lot of excess money. And at this point, I think the Governor probably could answer what the state is able to do. But it is my understanding in working with the state that there is very little that the state can do in a monetary way to help the victims of this particular disaster. The state really needs federal help.

Mr. **Buechner**. Thank you.

Mr. **Roe**. Any further questions of the gentleman from Nevada?

Mr. **Sensenbrenner**. Mr. Chairman?

Mr. **Roe**. I recognize the gentleman from Wisconsin.

Mr. **Sensenbrenner**. Mr. Chairman, I understand that when both the Kerr-McGee and PEPCON plants were built, this area was not very built up and they were built way out in the middle of nowhere and probably for a reason, because of the volatility of the material that was being manufactured.

Now, there have been a lot of subdivisions built. And I just came back from looking at the damage in the Green Valley subdivision. And, basically, Kerr-McGee is in the backyard of a lot of citizens. Do you think the Kerr-McGee plant should be closed up and not be allowed to produce ammonium perchlorate?

Mr. **Bilbray**. My feeling is this: First of all, I think that Kerr-McGee, first of all, the plants that were here when Henderson was created was not Kerr-McGee. That was other plants that were here during the war years. Kerr-McGee came later on the scene after the city of Henderson was established and residents were here. And, also, the fact is that most of the people in the community, I think, and if you talk to city officials in Henderson and others, were assured up until recently, until the explosion, that this was not a dangerous commodity. As our own tours, yesterday, virtually, that's what Kerr-McGee said. That this should not be dangerous. This should not go off. Unfortunately, the gun was loaded, contrary to what we were told.

I think that unless the people of Henderson can be assured of the safety of their people, and their property and their residence, that some action should be taken to either do one or two things: either move the plant from the immediate vicinity of the populated areas within a reasonable distance of Clark County. And one of my proposals is that Federal land be made available to move it out of the Henderson complex into some other area within a reasonable distance of the Las Vegas Valley, but where the citizens are safe, but yet the workers that work at Kerr-McGee could still be able to be available to go to work in that area.

Or the alternative is that no amount of that material of any size be kept on site, that it be removed to a safe area, such as I have noticed as we fly in over Nellis Air Force Base, many times, there are many bunkers laying out there where they store all sorts of hazardous materials, bombs and such, that this stuff could be removed and put in that area so there is no quantity of the chemical on hand at anytime. So, if there was an eruption at Kerr-McGee, that there would only be a minor explosion at the best.

The safety of the people of Southern Nevada is primary. We recognize our duties to the national defense and to the space agency, but no Nevada citizen should be put in jeopardy for his life, the life of his family or his property just for that reason. And I think that we could work—I think we could have our cake and eat it, too. I think we could help Kerr-McGee relocate or, if not relocate, at least get the materials off site so that if any explosion ever takes place, that no one will be hurt or injured.

Mr. SENSENBRENNER. Given the length of time it takes the bureaucracy to operate with environmental impact statements and the like, to do what you propose would take some months or perhaps a year or two. And what do you propose be done with the Kerr-McGee plant in the interim?

Mr. BILBRAY. Well, I think, Congressman, what I stated was that in the meantime, if the citizens of Henderson and Las Vegas Valley see light at the end of the tunnel, that steps are being made to make this thing safe, that I think the citizens of Southern Nevada are cooperative people. They have done a lot for the national effort in this country. But if they see no light at the end of the tunnel and the immediate step would be, again, like I stated is to get the material off site. As it is manufactured, take those drums that we saw lined up out there at Kerr-McGee and remove them out to Nellis Air Force Base or some Federal land area outside the city area so that there is not a large quantity of the stuff at any one site.

I mean if you only have a small amount of material on site at Kerr-McGee after it is manufactured and if something went wrong and that blew, it would be just a minor explosion. There would hardly be any jeopardy to anyone except the immediate people working in the plant. I think the people would tolerate it.

But I think if we go on with the premise of keeping millions of tons of the chemical on site, that I think people will be alarmed, will be concerned, and live in terror of what goes on there.

Mr. ROE. The Chair would like to remind the gentleman that we have a limited amount of time and I respect everybody's time, but we are going to get on with this hearing. So, therefore, if there are no further questions from the distinguished gentleman from Nevada, we will now call upon our first panel.

And the first panel are the distinguished state officials: The Honorable Richard Bryan, the Governor of the State of Nevada, accompanied by the Honorable Robert Miller, Lieutenant Governor of the

State of Nevada. And I understand under our program here this morning that they will also be accompanied by Mr. Arrendale [1] representing the citizens of the Green Valley area; a Mr. Wentz,[2] who is a Superintendent of Schools, and Mr. Loritz [3] who is with the hospital that we visited—the hospital officials we visited last night, St. Rose de Lima Hospital.

So, if all of our witness can assemble, we will go on from there. The Chair wants to first recognize the distinguished Governor of our State, Governor Richard Bryan, for his opening statement. Governor, you are recognized.

STATEMENT OF HON. RICHARD H. BRYAN, GOVERNOR, STATE OF NEVADA

Mr. **Bryan**. Mr. Chairman and members of the subcommittee, let me express again, as Congressman Bilbray——

Mr. **Roe**. We are having a little trouble with these microphones. Perhaps you will have to come a little closer so we can all hear.

Mr. **Bryan**. Are we live?

Mr. **Roe**. That's better.

Mr. **Bryan**. Mr. Chairman and members of the committee, let me express my appreciation, as did Congressman Bilbray, that yours has been a refreshing breath of fresh air to come out of Washington in light of the experience which the State of Nevada has had with the Federal establishment since the tragic events of May 4th of this year.

Mr. **Roe**. Can I stop you there, Governor, and accept the nomination? Is that okay? [Laughter.]

Mr. **Bryan**. Yes, it is. In Nevada, Mr. Chairman, you would receive it by acclamation.

We are particularly appreciative for your very supportive statements and for your demonstrated concern for the people in the City of Henderson. Nevada has had a long and proud record of playing a vital role in the national defense effort. Indeed, the origin of this community is traced to the advent of World War II and the necessity to step up the production of magnesium as part of the nation's war effort. The industrial complex was built as a result of that effort. My grandfather was a carpenter on the original town site homes, my father worked at the BMI complex during the early days of World War II.

Let me indicate that we are prepared as a community and as a state to continue to play a vital role in the nation's defense efforts. We understand the importance of the continued production of ammonium perchlorate. We understand it from a national defense perspective, space administration perspective, and we know that the launch of critical satellites for weather, for navigation and intelligence purposes all are dependent upon the use of ammonium perchlorate—1.7 million pounds, I believe, is the figure that Admiral Truly gave me in Washington last week—of ammonium perchlorate is required for each of the shuttle launches. So, we fully understand that.

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[1] Mr. James Arrendale, President of the Green Valley Community Association.

[2] Mr. Robert Wentz, Superintendent of the Clark County School District.

[3] Mr. Robert Loritz, Vice President for Clinical Services, St. Rose de Lima Hospital.

What we do not understand, however, is the same day that the Federal Government announces a financing plan to rebuild the PEPCON facility that another agency of the Federal Government says that there will be no help to the innocent victims of the tragic events of May 4th.

You have witnessed, as have each of the members of the committee, the devastating impact of that blast, both in terms of commercial properties and residential homeowners as well.

What we seek, damage reimbursement for homeowner and business person alike, that is not previously compensated by insurance. We are not asking that the insurance company be relieved of their contractual responsibilities to their insurers, but in a number of instances, there are deductibles. There are limitations. There are those individuals who were not insured, individuals who are self-insured. And Mr. Bloomquist, the manager from the City of Henderson, will provide you some documentation on that. The figures that he shared with me earlier is that the uncompensated damage loss would be in excess of $20 million.

What we seek, Mr. Chairman, is fairness. We believe that prospectively, the law needs to be changed so we do not have to go through the bureaucratic process which left the citizens of this city twisting in the wind for 34 days as an agency of the Federal Government kept us waiting before we received any indication as to whether our request for the declaration of disaster assistance would be acted upon.

We believe that it is important that the inventory of ammonium perchlorate be reduced at the Kerr-McGee facility. And there has been a commitment from officials in that facility to work with the state and local agencies to accomplish that purpose. There is a role for the Federal Government. We are told, Mr. Chairman, that the procurement policies by the Federal agencies that make use of ammonium perchlorate is such that inventories in the past have been unnecessarily large because the various missile systems, the space program, although they all use ammonium perchlorate, there are different blends, there are different formulations. It is not all one and the same and that the inventories have been maintained are large.

At the time of the Pacific Engineering explosion, we have been told that some 12,000 tons was on site at Kerr-McGee. That number, as you know, has been reduced from the information that we were provided with yesterday. It is important that the inventory that is on site be dispersed. That there be a special separation. And we certainly need the strong support of this committee and the Federal Government to insist that those commitments which had been made as far as special separation which minimizes the risk, that those be effected.

Finally, there has been talk about Federal assistance to rebuild Pacific Engineering. The company recognizes that that rebuilding must occur outside of the immediate base. There was discussion in Washington last week, that Kerr-McGee's facilities need to be expanded in terms of the production requirements for the nation. Any expanded capacity needs to be done outside of the immediate vicinity. We want to protect the job and employment base but the proximity to the metropolitan Las Vegas area and the urban impact that you have seen first hand, that constitutes a concern to the citizens of this community in terms of their safety which must be our paramount concern.

And, finally, we would like to ask consideration for those workers who have been dislocated as a result of the explosion which occurred on May 4th, that they be considered as well.

At the state level, we have empaneled a blue ribbon panel to prospectively address regulations that deal with zoning, health and safety, occupational standards and the Lieutenant Governor will address that issue. And, finally, if I might say, Mr. Chairman, that we are particularly grateful for the eloquent statement that you made to the President in asking him to reconsider the action by which the decision was denied to us to receive the Federal disaster assistance which, in my judgment, this community is entitled to as part of its commitment to the national defense effort in the interest of fairness.

Mr. ROE. I thank the Governor. The Chair recognizes Lieutenant Governor Miller.

STATEMENT OF HON. ROBERT J. MILLER, LIEUTENANT GOVERNOR, STATE OF NEVADA

Mr. MILLER. Chairman Roe and distinguished members of the subcommittee, I would like to begin by thanking you as well for holding this hearing, which I believe shows your sincere concern for the well-being of Nevadans victimized by the explosion on May the 4th.

In a follow-up to the previous testimony offered by Governor Bryan, I would like to lend my full support to the recommendations that he made on behalf of the blast victims. The physical, emotional and financial trauma sustained as a result of this incident cannot be overstated. I urge you to take the Governor's suggestions under serious consideration.

As he indicated, I am the chairman of a blue ribbon commission, formed by his Executive Order, to examine the adequacy of existing regulations pertaining to plants which manufacture, store or transport highly combustible materials in Nevada.

We were charged with reviewing the specific issues of health, safety, fire, insurance and zoning. The Commission is currently half-way through that 90-day parameter and we have already heard testimony on the important issues of fire, zoning, and, just this week, health and safety. Several recommendations and concerns have already surfaced in our hearings. As part of my testimony this morning, I would like to share the most important summarizations of those with you.

Without question, the most unsettling revelation to emerge so far is the fact that, despite the best intentions of Title III, Superfund Amendments and Reauthorization Act of 1986,[4] we still have such a limited knowledge available to us regarding the location, use, and transportation of hazardous and highly combustible materials. Having done a comparable job to other states in complying with the Act under its restrictive time frame, Nevada still does not possess a sufficient amount of this information to adequately insure the safety of its residents.

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[4] Public Law 99-499; 100 Stat. 1613-1782. Title III is the "Emergency Planning and Community Right-to-Know Act of 1986."

The consensus of our expert witnesses is that additional monies need to be appropriated out of the Superfund to allow for prompt SARA [5] program awareness and compliance measures to be undertaken and followed up.

While I realize there are many other important programs that exist under Title III, I would still urge you to consider extra appropriations to this area. The Federal Government has given the states a valuable tool with which to better protect their citizenry, but only with adequate resources will its great potential be realized.

Something of particular interest to Nevadans is the fact that the SARA reporting requirements deal only with hazardous materials and not explosives. Ammonium perchlorate, the material involved in the PEPCON explosion, apparently does not fall into either category and could, therefore, at least in theory, be excluded from inclusion.

I would like to briefly cover some of the recommendations the Commission has uncovered to date in a few specific areas, the first of which is fire prevention and protection. All of our witnesses have urged the immediate adoption of the 1988 Uniform Fire Code in order to provide a mechanism for more extensive licensing and enforcement capabilities. The consensus we received was that our existent statutes and regulations for the hazardous and combustible materials industry are sufficient to protect our citizenry. The weak link appears to be the lack of strong enforcement powers available to insure compliance. As a result, we develop reactive rather than pro-active regulatory agencies.

One main point that was introduced in the fire hearing, and has consistently been mentioned in every area we have examined, is the need for improved communication and cooperation between various governmental entities and jurisdictions involved in these matters.

A strong proponent of this was Dr. Frank Mitchell, Chief Medical Officer, Agency for Toxic Substances and Disease Registry for the U.S. Department of Health and Human Resources Services, who suggested that local and regional response plans be developed.

All too often, the regulation, enforcement and emergency response efforts of this industry are impeded by unnecessary conflicts and delays due to political and territorial issues.

It is my understanding that these kinds of relationships are much better today than they used to be. But in light of the FEMA situation that brings you here today, it is readily apparent that much more needs to be done to cultivate a more cooperative working environment. Without it, victims of these disasters are only revictimized by the very system they turn to for help.

The existence of a severe lack of knowledge also appeared in the area of transportation. Except for certain nuclear waste shipments, no one has any knowledge regarding the entry, exit, or routing of hazardous materials inside our state. An annual report of this movement is all that is required to be provided to state and local authorities upon request. This, to me, is frightening.

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[5] Superfund Amendments and Reauthorization Act.

Despite the fact that the EPA requires proper signage on transportation vehicles, without forewarning there can be no precautionary measures taken to enhance readiness in the event of an emergency. Just the day before yesterday in Kentucky, a train carrying hazardous materials was involved in a potentially disastrous accident.[6] Over 15,000 people were evacuated.

With an average of some 500,000 hazardous waste shipments moving across our nation every day, I believe it would be in the best interest of the Federal Government to assist states in securing this kind of information—certainly, here in Nevada, where it is the landlord of 87 percent of our property.

In this regard, it makes me uneasy to think that the Federal Government maintains operations in Nevada, the nature of which we are unaware, that might involve hazardous materials of potential danger to our citizenry.

I understand the necessity of secrecy in matters of national security, but I wonder if there is not some way of providing the state with information that could better prepare us for proper emergency response.

Nevada is proud to take an active role in our nation's defense through installations like Nellis Air Force Base, Fallon Naval Air Station, the Hawthorne Army Ammunition Plant, and the Nevada Test Site. This involvement is an important part of our past, present and future. But this is an era that requires candidacy and openness in government. Citizens will no longer accept face-value assurances of safety. They demand and have a right to expect sufficient information upon which state and local officials can prepare precautionary and emergency procedures.

On matters of zoning, we heard testimony that clearly illustrates the benefits of cooperative and pro-active efforts. At the Hercules Plant in Salt Lake City, massive rocket engines for the space program are built, loaded with fuel, and shipped out. Having been in that county since 1920, Hercules has grown considerably over the years to where it now encompasses several square miles in close proximity to residential areas. An extremely complex and cumbersome rezoning project was successfully accomplished only due to the cooperation of local and state governments, the management of Hercules, and citizen groups which gave input throughout the process. This example serves as a model to what can be done by working together. But they, too, are unaware of the use of certain military property which is actually closest to the surrounding residences.

Our meetings this week regarding health and safety issues revolving around SARA Title III requirements and OSHA[7] activities. Again, our witnesses felt that these programs can be extremely effective in establishing safer industry. But only with the caveat of their having sufficient funding to ensure understanding and compliance. I thank you for your willingness to be here today.

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[6] On June 22, 1988, a train operated by the CSX Transportation Corporation suffered an accident near Crofton, Kentucky. A tank car containing white phosphorus derailed and caught fire, forcing an evacuation. No injuries were reported.

[7] Occupational Safety and Health Administration.

[The prepared statement of Lieutenant Governor Miller follows:]

Statement of

Robert J. Miller
Lieutenant Governor
State of Nevada

Before the

U.S. House of Representatives

Subcommittee on Investigations and Oversight

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

June 24, 1988
9:00 a.m.
Henderson, Nevada

Chairman Roe and distinguished members of the subcommittee, I would like to begin by thanking you for holding this hearing which clearly shows your sincere concern for the well-being of the Nevadans victimized by the May 4th explosions at Pacific Engineering and Production Company. And thank you for inviting my testimony on these matters.

In follow-up to the previous testimony by Governor Bryan, I would like to lend my full support to the recommendations that he made on behalf of the blast victims. The physical, emotional and financial trauma sustained as a result of this incident cannot be overstated. I urge you to take the Governor's requests under serious consideration.

As he suggested in his testimony, I am the Chairman of the Blue Ribbon Commission formed by his executive order to examine the adequacy of existing regulations pertaining to plants which manufacture, store, or transport highly combustible materials in Nevada. We were charged with reviewing the specific issues of health, safety, fire, insurance and zoning. The Commission is currently halfway through our ninety-day parameter and we have already heard testimony on the important issues of fire, zoning, and just this week, health and safety. Several recommendations and concerns have already surfaced in our hearings. As part of my testimony this morning, I would like to share the most important of these with you.

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1986, we still have such limited knowledge available to us regarding the location, use, and transportation of hazardous and highly combustible materials. Having done a comparable job to other states in complying with the act under its restrictive time frame, Nevada still does not possess a sufficient amount of this information to adequately insure the safety of its residents.

The consensus of our expert witnesses is that additional monies need to be appropriated out of the Superfund to allow for prompt SARA program awareness and compliance measures to be undertaken and followed up. While I realize there are many other important programs that exist under Title III, I would still urge you to consider extra appropriations to this area. The federal government has given the states a valuable tool with which to better protect their citizenry, but only with adequate resources will its great potential be realized. Something of particular interest to Nevadans is the fact that the SARA reporting requirements deal only with hazardous materials and not explosives. Ammonium perchlorate, the material involved in the PEPCON explosion, apparently, does not fall into either category and could be exempted from inclusion.

I would like to briefly cover some of the recommendations that the Commission has uncovered to date in a few specific areas, the first of which is fire prevention and protection. All of our witnesses have urged the immediate adoption of the 1988 Uniform Fire Code in order to provide a mechanism for more extensive licensing and enforcement capabilities. The consensus we received was that our existent statutes and regulations for the hazardous and combustible materials industry are sufficient to protect our citizenry. The weak link appears to be the lack of strong enforcement powers available to insure compliance. As a result, we develop reactive rather than proactive regulatory agencies.

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With an average of some 500,000 hazardous waste shipments moving across our nation every day, I believe it would be in the best interest of the federal government to assist states in securing this kind of information - certainly here in Nevada where it's the landlord for 87 percent of our property.

In this regard, it makes me uneasy to think that the federal government maintains operations in Nevada, the nature of which we are unaware, that might involve hazardous materials of potential danger to our citizenry. I understand the necessity of secrecy in matters of national security, but I wonder if there isn't some way of providing the state with information that could better prepare us for proper emergency response. Nevada is proud to take an active role in our nation's defense through installations like Nellis AFB, Fallon Naval Air Station, the Hawthorne Army Ammunition Plant, and the Nevada Test Site. This involvement is an important part of our past, present, and future. But this is an era that requires candidacy and openness in government. Citizens will no longer accept face-value assurances of safety. They demand and have a right to expect sufficient information upon which state and local officials can prepare precautionary and emergency procedures.

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Our meetings this week regarding health and safety issues revolved around SARA - Title III requirements and OSHA activities. Again, our witnesses felt that these programs can be extremely effective in establishing safer industry. But only with the caveat of their having sufficient funding to insure understanding and compliance.

In concluding my testimony this morning, allow me to reiterate my gratitude to Chairman Roe and the Committee for the consideration and compassion you've shown by your presence here in Southern Nevada. This community has suffered a devastating blow, in part due to its willingness to house an industry of vital importance to our national security and progress. In your work to facilitate a safe and timely return to normalcy, I urge you not to turn your back on the innocent victims of this unfortunate disaster. Thank you for your kind attention.

Mr. Roe. Thank you, Lieutenant Governor.

Now, the next witness I think we will hear from, so as to get some continuity here, would be Mr. Wentz who is a Superintendent of Schools. We recognize Dr. Wentz.

STATEMENT OF ROBERT E. WENTZ, SUPERINTENDENT OF SCHOOLS, CLARK COUNTY SCHOOL DISTRICT

Mr. Wentz. Thank you. Congressman Roe and subcommittee members, I am appearing today to provide you with both facts and insights from the school system. And it is nice to see some friends from Missouri here as well to join our outstanding Congressman from Nevada, Jim Bilbray.

I am Robert E. Wentz, and I am Superintendent for the Clark County School District. On my left is Dr. Thurmond White who directed the masterful job of responding to our facilities from the very moment of the explosion. You have received some insight from our Congressman, Jim Bilbray, and some flavor of the impact on the schools. You have a good handle on the total impact as well, outlined by our Governor and our Lieutenant Governor, who have consistently pointed out the big picture and the impact of this particular experience on all of us.

My opportunity today is to share with you some facts and perceptions regarding the PEPCON explosion from the perspective of the public school community within the larger community of Henderson and Clark County.

As you probably already know, we are a county school district of a little over 100,000 students in 125 schools. Schools directly involved in this particular experience numbered 18: 4 senior high schools, 3 junior high schools, and 11 elementary schools. 16,738 students had to be evacuated and relocated. But, technically, because of the toxicity of the cloud that surfaced from the explosion, it could have impacted 100,000 students in 125 school locations.

As we look at the number of students, we also need to consider the fact that 1,515 staff members were directly involved in this particular experience. To date, as of yesterday, out of pocket, we have spent $400,434 in direct response to our school facilities.

We can talk about the tangible cost. We can look at the tangible evidence of damage to facilities. However, the intangible costs are as compelling for comment as those that can be expressed in numbers. Those of us that went through our facilities early in the morning the day after the blast were counting our blessings because we saw situations where, literally, we could have lost young people.

I'm talking about the vocational-technical center, where a long corridor with one wall of glass jammed with students—because of good training on the part of students and staff—they were quickly evacuated, and one minute after that time, a blast literally shattered this huge glass wall, imbedded it in the solid wall on the other side where a minute sooner students would have been in the path of that.

As you looked at Burkholder Junior High School and you saw a huge beam in the multi-purpose room where students were eating lunch—that was quickly evacuated—that could have come down on literally hundreds of students.

As you look at classrooms and you see heavy lighting fixtures that fell. Miraculously, in every case, not on students. In some cases, an absolute miracle, it fell in the aisle between students sitting looking at this.

So, we counted our blessings, but we also recognized the impact this was going to have on students afterwards. We have a crisis intervention team of six extremely well trained psychologists and two well-trained nurses. This crisis intervention team's primary responsibility in an emergency or trauma is to go into a school and work with the staff who must work on a daily basis with students.

We recognized that staff was traumatized as the students in this situation. They displayed tremendous courage and great calmness and provided great leadership to literally thousands of students during the explosion. Afterwards, they too assessed the potential loss of life that could have taken place in this explosion. There is no way to place a dollar value on the threat to life. There is no way to place a dollar value on the sleepless nights of young people or the question marks in their minds. The anguished looks on their faces when the blast took off on that day as they were wondering what happened to their mother, to their father, not being able to recognize that impact. So, that crisis intervention team to this day has provided some capable leadership. But it is going to be necessary, in our opinion, when school opens in the fall to see, again, the kind of trauma that students had thought about and will need some assistance and staff that will need some assistance.

So, it is impossible to quantify the pressure that was felt upon our staff in making the kinds of mature judgments that they made. I would go on record as saying I was extremely proud of our teachers and our support staff, 1,500 of them, directly, in all of them.

As we look at the building inspection and the damage assessment and the air sampling that was conducted by staff, certainly things were put back into order rather quickly. 308 staff members, some crews working around the clock so we could be back in operation.

Do we need support? I believe the Governor and the Lieutenant Governor and Senator Bilbray—or Congressman Bilbray—have made it quite obvious of the needs. But I would hope that we would also consider the fact that our Federal Government would have a responsiveness to all of us that would provide the kind of foundation to our young people and our staff in the comfort that somebody cares during major emergencies that can be expressed in tangible ways, certainly, but also in intangible ways.

It was without question one experience that no one wants to go through again. Certainly, for our young people. And we learned a great deal during the experience and certainly there is no substitute for personnel who have the ability to make sound judgments at the incident site.

Certainly, we have learned that cooperation that was forthcoming from Henderson and all across Clark County was absolutely essential and, certainly, beneficial. We appreciate your interest in being here and we will be happy to respond to any questions that you might have.

[The prepared statement of Mr. Wentz follows:]

TESTIMONY

ROBERT A. ROE, CHAIRMAN
MEMBERS OF SUBCOMMITTEE ON
INVESTIGATIONS
HOUSE OF REPRESENTATIVES
SCIENCE, SPACE AND TECHNOLOGY COMMITTEE

HEARING ON PEPCON EXPLOSION

JUNE 24, 1988

For the record, I am Robert E. Wentz, Superintendent of the Clark County School District.

Congressman Roe, I am appearing today to provide you and subcommittee members with both facts and perceptions regarding the explosion which occurred on May 4, 1988 at the PEPCON plant. My remarks come from the perspective of the public school community with its special population within the larger communities of Henderson and Clark County.

On may 4th, most emergency agencies were responding to public safety in terms of onsite fire fighting, medical care, and traffic control. School district personnel were focused on the safety of children and employees, agency cooperation, and public information.

Eighteen schools were directly affected by the explosion; eleven elementary schools, three junior high schools, and four senior high schools. Students at eleven of the schools were immediately evacuated, dismissed early to parents, or provided transportation to their homes. The population involved totaled 16,738 students at the eighteen schools. 5,000 students were transported by 40 district buses. This effort involved the decision-making and judgments of 58 administrators, 802 teachers, and 347 education support personnel.

The building inspection, damage assessment, and air sampling conducted by staff was completed within a timeframe that permitted all schools except Basic High School to resume operation on Monday, May 9, 1988. Basic High School required extensive assessment and testing to determine possible asbestos contamination and resumed operation on Friday, May 13, 1988. To re-occupy these facilities, a workforce of 308 was required; many crews worked around the clock.

District expenditures for emergency response are summarized as follows:

Department	Expenditure
Special Projects	$127,660.85
Maintenance	96,000.10
Operations	44,022.60
Subtotal	$267,683.55
Estimated costs-remaining projects	132,750.00
Total	$400,433.55

The number facts can be presented in a very straight-forward manner. Emotional impact and physical stress are not measurable in concrete terms, but are real and compelling issues for comment.

Journal entries and accounting audits will not record the worth of a threat to one human life, certainly not the lives of 17,000 students, their parents, their friends. Neither will the value of exercising judgment for the safety of other people's children ever appear in terms of dollars and cents. Requests continue for counseling both for children and adults, a sign that the incident is not yet past.

Also, we continue to learn: What could have been improved? Could better decisions have been made? What resources were missing? In this regard, we have determined that:

> There is no substitute for personnel who have the ability to make sound judgments at the incident site.
>
> The emergency plan for each location needs constant review.
>
> Emergency centers at agencies and entities require coordination and clear procedures.
>
> The emergency planning of one agency cannot occur in isolation from others.
>
> Communication procedures and systems require constant review and improvement.

Information must be controlled within the organization and for the public.

Physical damage requires assessment and response; so does psychological damage.

Congressman Roe, we pledge our support to assist the subcommittee in any manner. Thank you for the invitation to speak.

Mr. Roe. I thank the gentleman. And the Chair recognizes now Mr. Loritz, who is the Vice President of Clinical Services, St. Rose de Lima Hospital.

STATEMENT OF ROBERT W. LORITZ, VICE PRESIDENT, CLINICAL SERVICES, ST. ROSE de LIMA HOSPITAL

Mr. Loritz. Thank you, Mr. Chairman.

St. Rose de Lima Hospital is a small 74-bed hospital located approximately three miles from the explosion site. It is a non-profit private hospital. It was established in 1942 by the Federal Government at that time to provide for the medical care for the workers at the industrial sites. In 1947, the Sisters took over the hospital with essentially the same mission, even though the war wasn't going on. The plants were still in existence and they did provide medical care to the workers who were involved probably in national defense at that time.

Accredited hospitals, including St. Rose de Lima, prepare for two types of disasters: internal and external. Internal is when the normal operations are disrupted, such as fires. External is when there is a disaster outside the hospital in which we can expect a large influx of patients.

On May 4, 1988, the hospital experienced both an internal and an external disaster. Ninety percent of the windows on the first floor nursing units were blown out. Fifty percent of the windows on the second floor nursing unit were blown out and thirty percent of the windows on the third floor nursing unit were blown out. There was damage to an exterior glass block wall which necessitated the replacement of over 1,400 square blocks. The wall was pushed in about an inch and a half. There was damage to ten sets of exterior commercial doors and two sets of interior fire doors. The acoustic ceilings throughout the hospital—quite a few fell down. One of our floor medical office buildings was closed due to internal and external damage for four business days. Three other of the medical office buildings had glass damage and ceiling damage. All power was lost for three and a half hours requiring the use of emergency power. The telephones were off and on during that whole period of time.

Of the 38 hospitalized patients, fortunately, only 3 were injured due to flying glass. Two adults were injured—minor—due to the shards flying; however, one infant, one newborn—was injured. The baby had just been born, was being fed in the nursery; glass from the window broke, cut the baby in the eye and the baby was rushed over to the local neonatal intensive care unit. After inspection it was found that the newborn's eye was okay, but the baby did require plastic surgery to repair the eyelid.

One employee was slightly cut by flying glass, one surgical operation that was taking place had to be finished prematurely. The patient did come back about three weeks later to have the surgery.

There were 199 victims through St. Rose that first day. Normally, 35 to 45 patients come through our emergency room. We did have another 49 glass-related patients come through following, so that—through St. Rose, there was 248 victims came through due to the blast.

Eight of the victims were hospitalized, five were discharged the following day and two were discharged the day after that. One of the victims hospitalized overnight was a school child and the rest were adults.

The emotional problems have not been assessed and about a month ago two psychiatrists from the University of Nevada, Reno, School of Medicine came down and visited with us. And they fully intend to do a research study on the emotional impact of the explosion. And right now their research instrument is being submitted through the appropriate committees for approval at the School of Medicine.

The damage to the hospital—our estimates of cost of repair is between $120,000 and $150,000. Our insurance deductible is $5,000. However, there is a quirk in the insurance that says that there is $5,000 deductible per location. The insurance policy has identified 23 locations. The total liability to us could be $115,000. More realistically, we are negotiating with the insurance company about this and we expect our out-of-pocket expenses to be between $60,000 and $75,000. That is, for a hospital our size, any amount of $60,000 to $75,000, we could hardly afford that. Gentlemen, that is the end of my report. Thank you.

[The prepared statement of Mr. Loritz follows:]

St. Rose de Lima Hospital

June 24, 1988

Representative Robert Roe
Sub-Committee on Investigation of the
Science, Space, and Technology Committee

SUBJECT: **REPORT ON PEPCON EXPLOSION OF MAY 4, 1988**

Gentlemen:

St. Rose de Lima Hospital is a 74-bed private non-profit general acute care hospital located approximately three miles from the PEPCON explosion site. The Hospital was established in 1942, then called Basic Magnesium, by the Federal Government to provide medical care to the workers in the Henderson area who were involved in the War efforts.

The Adrian Dominican Sisters took over the hospital in 1947 with the same Mission, that is to provide medical care to the residents of the Henderson Community, most of whom worked at the Industrial plants.

Accredited hospitals prepare for two types of disasters: Internal and External. Internal is a disruption to the normal operations, such as a fire. External is a disaster occurring outside the hospital with a sudden influx of victims.

On May 4, 1988, St. Rose de Lima Hospital experienced both an Internal and External disaster at the same time.

- 90% of the windows on the first floor nursing unit were blown out.
- 50% of the windows on the second floor nursing unit were blown out.
- 30% of the windows on the third floor nursing unit were blown out.
- There was damage to an exterior glass block wall requiring the replacement of 1,450 - 8" square blocks
- There was damage to ten sets of exterior commercial doors and two internal doors.

102 Lake Mead Drive Henderson, Nevada 89015 (702) 564-2622

- Acoustic ceilings throughout were damaged needing leveling, new support wires, new grids, and new tiles.

- The Chiller broke loose from its mountings.

- One of four Medical Office buildings was inoperable for four business days due to interior and exterior damage.

- Three other Medical Office Buildings had glass breakage and ceiling damage.

- All five of the Nun's homes had some damage, either glass and/or doors.

- All power was lost for 3-1/2 hours necessitating the use of Emergency power system.

- Telephones were intermittently inoperable.

- Of the 38 hospital patients, three were injured by flying glass. One patient, a newborn girl, was thought to have a glass sliver in her eye. After transfer to the local Neonatal Intensive Care Unit, eye damage was ruled out but plastic surgery to the right eyelid was performed.

- One employee was slightly cut by flying glass.

- One surgical operation in progress was finished prematurely, requiring additional surgery several weeks later.

- There were 199 casualty victims seen the day of the explosion, with 49 additional follow-up ones for a total of 248 victims seen. The number of patients usually seen in the Emergency Room is between 35-45 per day.

- Eight of the victims were hospitalized at St. Rose de Lima Hospital with five being released the following day, and two others the day after. Most of the non-hospitalized victims had cuts due to flying glass.

COST TO REPAIR DAMAGE

- The estimated cost to repair the damage is between $120,000 and $150,000.
- Our Insurance policy states there is a $5,000 deductible "per location". With 23 locations, this could make the total cost to St. Rose de Lima Hospital $115,000.
- After negotiation with the Insurance carrier, we estimate our actual out-of-pocket costs will be between $60,000 - $75,000.

CONCLUSION

The same Industrial complex that participated in the War efforts during World War II still serves a strategic role in our National Defense. This Hospital was opened by the Federal Government to serve the workers then and it continues to serve the workers now.

As the closest Medical facility, St. Rose de Lima Hospital plays a vital role to those involved with producing products important to the security and growth of the United States.

Our out-of-pocket expenses will be between $60,000 and $115,000 depending on the negotiations with the Insurance Carrier. This amount of money is significant to a 74-bed Hospital.

During the budget preparation process for next Fiscal Year, many capital item requests had to be denied. To compensate for this additional expense, some capital items already approved may have to be denied due to limited funds. As most of the capital items are Medical equipment, these are the ones most likely to be cut.

St. Rose de Lima Hospital could use assistance in covering our out-of-pocket expenses due to the explosion, and supports efforts to have the Federal Government provide this financial assistance.

Thank you.

Respectfully Submitted,

Robert W Loritz

Mr. Robert W. Loritz, Vice President
Clinical Services

RWL/jk

Mr. **Roe**. Thank you very much, Mr. Loritz.

Mr. Arrendale represents, I understand, some of the citizens from the Green Valley neighborhood. Mr. Arrendale.

STATEMENT OF JAMES ARRENDALE, PRESIDENT, GREEN VALLEY COMMUNITY ASSOCIATION

Mr. **Arrendale**. Mr. Chairman, distinguished guests and fellow citizens. My name is Jim Arrendale. I am a resident of Henderson, Nevada, and president of a pro-active group of Henderson citizens. I am gratified and humbled by this great opportunity of testifying before this committee.

I am compelled by a personal account of the events of the 4th of May, the resulting trauma caused to my family and the subsequent events that needlessly compounded this tragedy.

I consider my feelings typical and my experience common to the relevant issues of this hearing and the events of that day. I do not wish to represent myself as speaking for all the citizens, for our community is severely divided and there are those whose view would differ from mine.

Segments of this community will not admit the devastation that has come upon us, but we must understand that more hardship would be poured upon them by doing so. At this point, a united community would close forever the chemical plants that have served this area since its infancy. These plants, for many years the economic lifeblood of Henderson, provide employment and security to a large work force. They pay taxes and support local activities. They indeed have been good neighbors and have contributed to the growth of this area.

There is, of course, another view. Henderson is one of the fastest growing cities in the United States. A population of 57,000 residents will bulge to over 150,000 within seven years. The new growth sees these plants in a different light. They see the pollution of the ground and are constantly reminded of the pollution in the air by what is called "The Henderson Cloud." Peaceful co-existence had been tolerable for the past ten years, with little regard for the other's point of view.

On May the 4th, two camps were polarized. A meeting called by the mayor several days later demonstrated how divided our city had become. One camp demanding the plants be closed forever, the other insisting that what had occurred was exaggerated and a long-awaited excuse to close the plants.

Shame on us. Shame on us for not seeing that we were all victims of an accident that we shall never forget. Shame on us for not seeing and understanding what it means to be without employment and the ability to feed our families. Shame on us for not admitting that we are scared to death and that others might be also. After the dead and the injured, should we not have looked more closely at those who ran for those lives, at those who witnessed the awesome force that ripped steel doors from their hinges, blew windows out of their casings and shame on us for not recognizing that it is only human nature to protect the safety and well-being of those we love. Shame on us for not crying together and thanking God that a miracle had occurred in our presence.

The shame we bear is ours. We will accept it as a community and we will come to terms with it with the passage of time. But there is a greater shame, one that is not ours, for we were victims trying to piece together our lives, trying to protect our respective futures and our homes. Victims turned inward in shock and confusion. Victims that almost immediately began a cycle of re-victimization.

The investigation into the cause of the PEPCON explosion was to be completed two weeks after it began. We are still waiting. We still do not know the cause.

A team of safety experts, hired to make recommendations to Kerr-McGee to insure the safety of that plant, started off by telling this community that ammonium perchlorate is not an explosive. Upon submitting conclusions of their findings to Kerr-McGee, they announced that they would begin production of this product immediately upon meeting the eight mandatory requirements. One week later, the Clark County Fire Department would be quoted as saying the Kerr-McGee plant was "a time bomb waiting to explode."

The Federal Emergency Management Agency waited a full month to tell us that there was no disaster: no money; no need. A second trip for the same results.

Rumors of a national emergency surface because of the shortage of ammonium perchlorate. NASA and the Department of Defense put out the word that $90 million will be distributed between Kerr-McGee and PEPCON to rebuild and expand production.

With Kerr-McGee ready to resume production, our Clark County Fire Department admits there is nothing they can do to stop them. They later "compromise" an agreement.

The corporate arrogance of Kerr-McGee and the insensibility of the Federal Government has greatly compounded the fears and frustrations of a community beset with problems.

May 4, 1988, will be remembered as the day that we learned the value of our contribution to the defense and space programs of this nation. We learned the risk at which we set ourselves for the benefit of many.

Is it right that we should be asked to bear such a heavy burden for the safety and protection of people outside our borders when we are not safe and secure within?

Is there not some measure of assurance of safety that we might receive in exchange for this contribution? Must this contribution extend beyond the immediate need for ammonium perchlorate?

It is time that we recognize that we are all victims. Let us begin in the spirit of cooperation, but let us begin where the Preamble begins. It begins with, "We, the people."

Mr. Chairman, I am gratified, again, and thankful for the opportunity to be here and I am especially grateful to you for what you have done for the State of Nevada.

[Applause.]

[The prepared statement of Mr. Arrendale follows:]

TESTIMONY OF

JIM ARRENDALE
PRESIDENT
GREEN VALLEY COMMUNITY
ASSOCIATION

JUNE 24, 1988

MR. CHAIRMAN
DISTINGUISHED GUESTS
FELLOW CITIZENS:

MY NAME IS JIM ARRENDALE. I AM A RESIDENT OF HENDERSON NEVADA AND PRESIDENT OF A PROACTIVE GROUP OF HENDERSON CITIZENS. I AM GRATIFIED AND HUMBLED BY THIS GREAT OPPORTUNITY OF TESTIFYING BEFORE THIS COMMITTEE.

I AM COMPELLED BY A PERSONAL ACCOUNT OF THE EVENTS OF THE 4TH OF MAY, THE RESULTING TRAUMA CAUSED TO MY FAMILY, AND THE SUBSEQUENT EVENTS THAT HAVE NEEDLESSLY COMPOUNDED THIS TRAGEDY.

I CONSIDER MY FEELINGS TYPICAL AND MY EXPERIENCE COMMON TO THE RELEVANT ISSUES OF THIS HEARING AND THE EVENTS OF THAT DAY. I DO NOT WISH TO REPRESENT MYSELF AS SPEAKING FOR ALL CITIZENS, FOR OUR COMMUNITY IS SEVERLY DIVIDED AND THERE ARE THOSE WHOSE VIEW WOULD DIFFER FROM MINE.

SEGMENTS OF THIS COMMUNITY WILL NOT ADMIT THE DEVASTATION THAT HAS COME UPON US, BUT WE MUST UNDERSTAND, THAT MORE HARDSHIP WOULD BE POURED UPON THEM BY DOING SO. AT THIS POINT A UNITED COMMUNITY WOULD CLOSE FOREVER CHEMICAL PLANTS THAT HAVE SERVED THIS AREA SINCE ITS INFANCY. THESE PLANTS, FOR MANY YEARS THE ECONOMIC LIFEBLOOD OF HENDERSON, PROVIDE EMPLOYMENT AND SECURITY TO A LARGE WORK FORCE, THEY PAY TAXES AND SUPPORT LOCAL ACTIVITIES. THEY INDEED, HAVE BEEN GOOD NEIGHBORS AND HAVE CONTRIBUTED TO THE GROWTH OF THIS AREA.

THERE IS, OF COURSE, ANOTHER VIEW. HENDERSON IS ONE OF THE FASTEST GROWING CITIES IN THE UNITED STATES. A POPULATION OF 57,000 RESIDENTS WILL BULGE TO OVER 150,000 WITHIN SEVEN YEARS. THIS NEW GROWTH SEES THESE PLANTS IN A DIFFERENT LIGHT, THEY SEE THE POLLUTION OF THE GROUND AND ARE CONSTANTLY REMINDED OF THE POLLUTION IN THE AIR BY WHAT IS CALLED "THE HENDERSON CLOUD". PEACEFUL CO-EXISTANCE HAD BEEN TOLERABLE FOR THE PAST TEN YEARS, WITH LITTLE REGARD FOR THE OTHERS POINT OF VIEW.

ON MAY THE FOURTH, TWO CAMPS WERE POLORIZED, A MEETING CALLED BY OUR MAYOR SEVERAL DAYS LATER, DEMONSTRATED HOW DIVIDED OUR CITY HAD BECOME. ONE CAMP DEMANDING THE PLANTS BE CLOSED FOREVER, THE OTHER INSISTING THAT THAT WHAT HAD OCCURED WAS EXAGGERATED AND A LONG AWAITED EXCUSE TO CLOSE THE PLANTS.

SHAME ON US......SHAME ON US, FOR NOT SEEING THAT WE WERE ALL VICTIMS OF AN ACCIDENT WE SHALL NEVER FORGET. SHAME ON US...FOR NOT SEEING AND UNDERSTANDING WHAT IT MEANS TO BE WITHOUT EMPLOYMENT AND THE ABILITY FEED OUR FAMILIES....SHAME ON US....FOR NOT ADMITTING THAT WE ARE SCARED TO DEATH....AND THAT OTHERS MIGHT BE ALSO. AFTER THE DEAD AND INJURED....SHOULD WE HAVE NOT LOOKED MORE CLOSELY AT THOSE THAT RAN FOR THIER LIVES, AT THOSE WHO WITNESSED THE AWESOME FORCE THAT RIPPED STEEL DOORS FROM HINGES, BLEW WINDOWS OUT OF THEIR CASINGS AND SHAME ON US ..FOR NOT RECOGNIZING THAT IT IS ONLY HUMAN NATURE THAT TO PROTECT THE SAFETY AND WELL BEING OF THOSE WE LOVE. SHAME ON US FOR NOT CRYING TOGETHER...AND THANKING GOD THAT A MIRICLE HAD OCCURRED IN OUR PRESENCE.

THE SHAME WE BEAR IS OURS...WE WILL ACCEPT IT AS A COMMUNITY AND WE WILL COME TO TERMS, WITH THE PASSAGE OF TIME.

BUT THERE IS A GREATER SHAME, ONE THAT IS NOT OURS....FOR WE WERE VICTIMS, TRYING TO PUT THE PIECES OF OUR LIVES BACK TOGETHER, TRYING TO PROTECT OUR RESPECTIVE FUTURES AND OUR HOMES, VICTIMS... TURNED INWARD, IN SHOCK AND CONFUSION. VICTIMS THAT BEGAN AN ALMOST IMMEDIATE CYCLE OF RE-VICTIMIZATION.

THE INVESTIGATION INTO THE CAUSE OF THE PEPCON EXPLOSION WAS TO BE COMPLETED TWO WEEKS AFTER IT BEGAN, WE ARE STILL WAITING...WE DO NOT KNOW THE CAUSE.

A TEAM OF SAFETY EXPERTS, HIRED TO MAKE RECOMMENDATIONS TO KERR-McGEE TO INSURE THE SAFETY OF THE PLANT, STARTED OFF BY SAYING THAT THE CHEMICAL AMMONIUM PERCLORATE IS NOT AN EXPLOSIVE....UPON SUBMITTING THE CONCLUSIONS OF THIER FINDING KERR-McGEE ANNOUNCED IT WOULD BEGIN PRODUCTION OF AP AS SOON AS EIGHT MANDITORY REQUIREMENTS WERE MET. ONE WEEK LATER, THE CLARK COUNTY FIRE DEPARTMENT WOULD BE QUOTED AS SAYING THE KERR-McGEE PLANT WAS "A TIME BOMB WAITING TO EXPLODE".

THE FEDERAL EMERGENCY MANAGEMENT AGENCY WAITED A FULL MONTH TO TELL US THAT THERE WAS NO DISASTER...NO MONEY AND NO NEED. A SECOND TRIP FOR THE SAME RESULTS.

RUMORS OF A NATIONAL EMERGENCY SURFACE BECAUSE OF THE SHORTAGE OF AMMONIUM PERCLORATE....N.A.S.A. AND THE DEPARTMENT OF DEFENSE PUT THE WORD OUT THAT 90 MILLION DOLLARS WILL BE DISPERSED BETWEEN

KERR-McGEE AND PEPCON TO REBUILD AND EXPAND PRODUCTION IMMEDIATELY.

WITH KERR-McGEE READY TO RESUME PRODUCTION, OUR CLARK COUNTY FIRE DEPARTMENT ADMITS THERE IS NOTHING THEY CAN DO TO STOP THEM.... THEY LATER "COMPROMISE" AN AGREEMENT.

THE CORPORATE ARROGANCE OF KERR-McGEE AND AND THE INSENSITIVITY OF OF FEDERAL GOVERNMENT HAVE GREATLY COMPOUNDED THE FEARS AND FRUSTRATIONS OF A COMMUNITY BESET WITH PROBLEMS.

MAY 4, 1988 WILL BE REMEMBERED AS THE DAY WE LEARNED THE VALUE OF OUR CONTRIBUTION TO THE DEFENSE AND SPACE PROGRAMS OF THIS NATION. WE LEARNED THE RISK AT WHICH WE SET OURSELVES FOR THE BENEFIT OF MANY.

IS IT RIGHT THAT WE SHOULD BE ASKED TO BEAR SUCH A HEAVY BURDEN FOR THE SAFETY AND PROTECTION OF PEOPLE OUTSIDE OUR BORDERS, WHEN WE ARE NOT SAFE AND SECURE WITHIN.

IS THERE NOT SOME MEASURE OF ASSURANCE OF SAFETY THAT WE MIGHT RECIEVE IN EXCHANGE FOR THIS CONTRIBUTION? MUST THIS CONTRIBUTION EXTEND BEYOND THE IMMEDIATE NEED FOR AMMONIUM PERCLORATE?

IT IS TIME WE RCOGNIZE THAT WE ARE ALL VICTIMS. LET US BEGIN TO HEAL IN THE SPIRIT OF CO-OPERATION....BUT LET US BEGIN WHERE THE PREAMBLE BEGINS.....WITH "WE THE PEOPLE"

Mr. **Roe**. Well, thank you very much for a very substantive response. Let me make one observation, however, if I may before we call upon our people to ask questions. There are a few points I want to make myself.

Mr. **Sensenbrenner**. Has Mr. White testified?

Mr. **Roe**. No. Mr. White is accompanying Mr. Wentz? Is that correct? Mr. White is accompanying Mr. Wentz.

You know, I think we have to dispel one point and that point ought to be dispelled, that there are people, having nothing to do with profits or politics, that are like you all, they care about other people.

And we have a tendency to come down—all of us—if you talk about the victims and they say, "Well, everybody is back." That just is not true. This committee could have sat on its duff in Washington and I would not have been here and that would have been, you know, "So, another accident. They happen everyday in this country." God forbid, as was mentioned in some of your testimony. So, there are people that care. But we have to remember what we are trying to achieve. And that is the purpose for being here.

We have a disagreement, for example, of the dollar value, if you like, of the damages that were done. We have got to crystallize that. What are the facts? That is what the committee has to deal with. And what are existing laws? Do we have to change the law to be able to accommodate that issue? I think that is a very important step. And that is one of the things we want to be able to get out today.

I think there is another point that has to be made, however, that we are all citizens of one country. And, you know, wherever you go in this nation, all these kinds of situations exist and we have got to find the best balance.

Out of disaster comes some good. We are extraordinarily fortunate, in this Member's judgment, in view of the order of magnitude involved, that there was no more damage done particularly where life is involved. Now, the committee is very well aware of that issue. So, we have been very, very lucky in spite of order of magnitude that has happened here.

The question before us is, however, what are we going to do about tomorrow? It is not the nickels and dimes we are going to get on the issue alone—is the issue. The issue of what is the future of this particular industry as far as this company is concerned and what is the future of this particular industry as far as the people are concerned and what would be the best thing to do? And that is the purpose of our being here.

We are an investigative, oversight committee, but we are also an authorizing committee. And I think that that is very important to point out.

Now, having said that, let me make a couple of quick summaries so we can get on. I think all of your testimony has been splendid, Governor, right on down. I'm interested very much in what Lieutenant Governor Miller has mentioned in the some of the observations of your commission that you have established is now looking into. Long overdue. Wonderful idea.

I think that some of the issues that we spoke about, the transportation of this material, I want to get to a point in due course, and we have other experts and members of the government who will be testifying. Is the one issue that seems to permeate through the whole situation is whether or not the material is dangerous or explosive?

This member observed when we visited the PEPCON plant that the immediate defense arose on the point that there was a gas line under the plant which is the gas line that caused the explosion. And we understand it is being looked into. And when we visited the Kerr-McGee people, they said, "We do not have a gas line—we have a small line coming into our plant." That is not the issue. That is not the issue.

The fact remains the plant blew up. That is what the issue is about. So, the idea of transporting this material, of which I understand some 75 percent or some 80 percent is transported by truck versus 10 percent by rail, takes a much more point of view than what happened in this particular accident.

And you mention about sufficient data being available. We agree with you. On the other hand, Mr. Sensenbrenner and I were touching on the point of view the Superfund bill requires a response. That is written to the law as far as toxic material is concerned. Whether it is being carried out or not and to what degree, there is a debate on that which we agree with. Better cooperation with agencies, we totally agree with you. I think the hazardous shipment issue is important. The idea of the damage that really cannot be measured, vis-a-vis the psychological damage that has been done, and I would say particularly where the children are involved.

I think the idea of the crisis intervention team is a great idea. The fact that the hospital situation was able to prevail and the losses involved in the insurance and I know the members want to take that up, which we will get into.

So, now I want to turn over to the members of the committee to ask any specific questions they want to ask. The Chair, of course, recognizes distinguished—the distinguished ranking member from Wisconsin.

Mr. Sensenbrenner. Thank you very much, Mr. Chairman, and I, too, would like to commend the witnesses for some excellent testimony and an overview of what is going on here. I think that the primary issue of concern to the State of Nevada and many of the citizens here is the apparent fumbling around by FEMA in terms of the disaster request that the Governor has submitted.

Before asking questions, let me say that I represent a district that is frequently hit by tornadoes and every 10 years or so we also have a devastating ice storm which I think is something few in this audience would be familiar with. Both of those are disasters, although the tornadoes are usually on a much more limited scale than either the ice storm or the PEPCON disaster here. But the Office of the Governor of Wisconsin has kind of got the disaster declaration issue down to a tee. And before a request is made to the President for a federal disaster declaration, the State Office of Emergency, government and local authorities work closely in conjunction with local government officials and private insurance carriers to get precise figures as to the extent of the damage.

Now, I have been furnished copies, Governor, of your two letters to the President, one dated May 7th, 1988, and the other dated

May 15th, as well as the FEMA response. And it seems to me that most of the concerns that FEMA has expressed is whether insurance coverage would be adequate enough to preclude the designation of this area as a disaster area.

And I think we have to keep in mind that the federal law has always stated that insurance deductibles are not to be included in the computation of total uninsured losses but property that is completely uninsured or where the damage was over the limits of the policy would be taken into account.

Now, neither your letter of May 7th nor your letter of June 15th specifically hits the uninsured non-deductible damage that has been documented here. And I think that is basically why FEMA has not granted the disaster declaration that you have requested.

Have you gotten some more specific information over and above your letter of June 15th to the President through the regional director at FEMA and San Francisco that can be sent on out to them for their consideration during this appeal process?

Governor BRYAN. Mr. Sensenbrenner, with the greatest respect extended to you, we would disagree with the interpretation. We were told by FEMA that the deductibles could be included. We were told by them that it could be.

Mr. SENSENBRENNER. That is not what we are told in Wisconsin. We are told that they cannot be included.

Governor BRYAN. Therein, I respectfully submit is the problem is that there are no clear definitive guidelines. The only guidelines that we are familiar with by law read as follows: "The recommendation with respect to whether the request for disaster assistance will be approved will be based on a report which will indicate whether or not the situation is of such severity and magnitude so as to be beyond the capabilities of the state and its local governments and whether or not federal assistance under the law is necessary to supplement the available resources of state and local governments." [8]

May I suggest to you with the greatest respect, that is a pretty vague guideline. Now, we were told that the deductibles could be included and even if your interpretation is correct, why in God's sake would it take 34 days? We have never been told that. Why would we not have been told immediately after the application: "Hey, look, there is a problem. Can you come up?" We heard nothing for 34 days. Not one word.

Mr. SENSENBRENNER. Well, we do have a witness from FEMA that will be appearing later on this morning and I hope that that question of yours will be answered.

My reading of the documentation from FEMA is that they are looking for a way that they can approve the disaster request under the applicable laws, applicable guidelines. And I have been in this business of legislating for 20 years and dealing with the bureaucracy on behalf of my constituents and one of the things I like to prevent the bureaucrats from doing is telling my constituents, "no." Because once that happens, then the bureaucrats' feet are in concrete and it takes much, much more work to get them to change their mind. So, if they need more information, I am just as happy to give them more information so that they do not make an initial decision that they might have to reverse.

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[8] The Governor quotes from 44 CFR 205.35(b)(1).

Governor BRYAN. And that is the problem, of course, is that no additional information was requested. If indeed their perception was that some aspect of the original application was defective in any way, we had no indication, sir, from them: "Would you provide us a little bit more information? This is not as clear as we would like. Let me call to your attention that this particular provision of law does not allow us—" We received no indication.

Mr. SENSENBRENNER. I will have a few questions of the FEMA representative when he appears. I have one further line of questioning that I would like some information on. When the PEPCON and Kerr-McGee plants were originally built, they were out in the middle of nowhere. And, as a result of the growth of Southern Nevada and some rather generous zoning requests that were granted developers through the legal procedures here, Las Vegas and Henderson got ever, ever closer to plants where these hazardous materials are built. If we do rebuild the PEPCON plant, whether it is PEPCON or another corporation outside of the Las Vegas valley, what guarantees can you give us as state officials that the zoning creep will not put us in the same position 50 years from now?

Governor BRYAN. Well, that, of course, is the purpose of the blue ribbon task force and panel that the Lieutenant Governor chairs. We recognize that state and local government zoning restrictions need to be much more cognizant of the danger and the hazard represented by the manufacturer of certain types of products. And the existing legal framework did not, in my judgment, adequately address that largely because there was not a recognition, it seems to me, Mr. Sensenbrenner, that ammonium perchlorate had the kind of potential hazard that we saw occur on May 4.

I think most folks, even in the technical community, were surprised. In fact, the committee that came in at the request of Kerr-McGee expressed—and I think the word that they used was "surprise"—that, indeed, this explosion occurred.

Mr. SENSENBRENNER. Well, if you make the stuff you ought to be surprised that an explosion occurs.

Governor BRYAN. But these are so-called technical experts who know a good deal more about the technical processes than do those of us who are non-technicians. They had maintained that this was not explosive. They concluded after coming here that this is indeed explosive, as we all know.

Mr. SENSENBRENNER. Well, my point is this—the temptation is there when there is a zoning request for development or a plant expansion to grant it so as to broaden the tax base and bring more revenue in. And we all have fallen into that trap when we have had those decisions to make. And it seems to me that we have got to prevent a recurrence of having built-up areas and new subdivisions getting closer and closer to any place where hazardous materials are manufactured or stored.

Governor BRYAN. It seems to me, Mr. Sensenbrenner, that might also be addressed from your perspective as well. As you know, 87 percent of the State of Nevada is under the ownership of the Federal Government. Perhaps in the relocation process, Federal land, as

Congressman Bilbray suggested, may be involved. At least one of the sites that is being considered by PEPCON is part of the land exchange which you and the Members of Congress approved just this session. And there are provisions for lease conditions which must be met before the Secretary of Interior can sign off. That buffer zone that you suggest, I think, is an excellent idea. Perhaps that can be incorporated in the provisions if, indeed, that becomes a reality, that particular site or another site in which Federal agencies are involved as landlords or as conveyors of title to insist that that occurs because we would never want a repeat of this.

Mr. SENSENBRENNER. Thank you, Governor. Thank you, Mr. Chairman.

Mr. ROE. I thank the gentleman from Wisconsin. The Chair recognizes the distinguished gentleman from Missouri, Mr. Volkmer.

Mr. VOLKMER. Thank you very much, Mr. Chairman.

I wish to commend all the witnesses for their statements and in particular, Mr. Arrendale, for yours. To me it is a very thoughtful statement because I think it is something that all of us are confronted with and that is that we need that ammonium perchlorate for our space and defense programs. We also need to make sure that the people in the surrounding areas have safety in their homes and businesses. And it is a little bit of a quandary, as the Chairman pointed out and as Mr. Sensenbrenner just pointed out. There are a lot more residences around those buildings, factories and plants, now, than there were when they were built.

Just out of curiosity, Mr. Arrendale, what is your profession?

Mr. ARRENDALE. I am a realtor, sir.

Mr. VOLKMER. I just wondered because you did very well.

Governor, I would like to ask you—did FEMA contact your office before they made their very first evaluation? As I understand, they made two, and under the appeal process, they will be making a third. Could you tell us briefly how that process went as far as the first two evaluations are concerned, with regard to your office?

Governor BRYAN. Mr. Volkmer, if you would extend me just a little flexibility to indicate that, historically, the relationship between FEMA and the State of Nevada had been an excellent one. We had floods in northern Nevada two or three years ago. Their response was prompt, efficient. I mean, we would have nothing but the highest comment to give to them in terms of their performance.

So, in the aftermath of May 4th, the expectation was that we would receive a similar kind of response. The day of the accident, we notified them: May 4th. The first team arrived the next day. Again, at least preliminarily, the indication that we were going to have the same kind of responsiveness.

Thursday and Friday, they conducted a preliminary survey in conjunction with the State Emergency Management Division at the state level. We heard nothing, absolutely nothing, until a news commentator called and said, "Look, we understand that a second survey team is coming out, not from the same region that had conducted the initial survey." We did not know why they were coming out because there had been no indication, again, in response to Congressman Sensenbrenner's question, that there was any problem with the application, that there was any need for any additional information. So, the information came to us from a news report which was subsequently confirmed.

The second team comes up. Before they had left town, second team members were being quoted by the press. There is even recorded television video that they are going to recommend against any assistance. My office was contacted. We know nothing about that.

Mr. **Volkmer**. Had that second team—I am sorry to interrupt, but had that second team at any time contacted your office?

Governor **Bryan**. No. Although as soon as we found that they were coming in, we did offer to cooperate fully with them. Indeed, Mr. Volkmer, the region in San Francisco, the region was not even aware that the second team was coming out. When we called the region to say, "Look, we just received a press report they were coming out," because we did not know which team or where it was coming from. We assumed that maybe it was the same team that originally came out and was somehow coming back again. They knew nothing about it.

Mr. **Volkmer**. In other words, your office really had not requested any assistance whatsoever from them as far as obtaining information and data, *et cetera*.

Governor **Bryan**. That is correct, Mr. Volkmer.

Mr. **Volkmer**. Now, on the appeal, on the third evaluation which I understand—it depends on who I listen to—maybe it has already finished. It just started yesterday, but may be already finished today. I do not know if that is true or not, but we are going to find out later on in this hearing today. What about that? Has your office been contacted in regard to this last one on the appeal?

Governor **Bryan**. We were notified that that team was going to be coming out.

Mr. **Volkmer**. But not asked to provide any information or data, *et cetera*.

Governor **Bryan**. Not that I am aware of. We dispatched our people to work with them. And it is my understanding that, certainly, there was cooperation in terms of any assistance. But, again, in terms of communications as one would ordinarily expect it or indeed as it had occurred in the past, Mr. Volkmer, no. These communications that we received were essentially from third parties and in almost every instance, generally members of the media calling us: "Have you heard?"

Mr. **Volkmer**. I would like to ask you, you or the Lieutenant Governor to comment—later on we are going to have testimony from Grant Peterson.[9] He can comment, maybe, on your comments. I want you to know that because he is going to be testifying later. And he states on page 5 of his statement, "The next factor is availability of insurance to assist in recovery. The Nevada Division of Insurance reports that over 11,000 claims have been filed. The average claim for home and personal property damage is $3,720 and the average deductible is $233. The small average deductible makes it clear that the majority of damage was covered by insurance."

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[9] Mr. Grant Peterson, Associate Director, State and Local Programs and Support, Federal Emergency Management Agency.

Do you follow that logic? Can you follow that logic?

I'm not asking anybody for comments. Please, just the witnesses here.

Do you follow that one relates to another as to how much noninsurable loss is out there—noninsured loss is out there?

Governor BRYAN. It's a *non sequitur*, in my opinion.

Mr. VOLKMER. Now, this is another one that you can surely comment on. The very next paragraph on page 6: "The next factor is the impact on state and local financial resources. The state operating budget is reported to be approximately $585 million. The uninsured damage to public buildings and facilities and eligible emergency protective measures is approximately $403,000, or an even seven-hundredths of one percent of this budget."

And that is the end. It does not say that you should take care of it or not, but I assume that is what they are meaning. So, you in the state have a budget of $585 million; I do not know how much reserve you have. I know some state budgets are pretty thin. How is yours? Can you pick up that money and send it back here and we do not have to have FEMA help anybody?

Governor BRYAN. Well, I do not think that we can. First of all, it would require a special session of the legislature, Mr. Volkmer. And the point that we make is that if, indeed, as we are told—I personally believe and I think most Nevadans do, that the production of ammonium perchlorate is absolutely essential to the nation's defense.

Mr. VOLKMER. Correct.

Governor BRYAN. If we undertake that effort in response to a nation's need and to be good citizens, is it unreasonable and unfair that the same Federal Government that says to those plants, "We are going to provide additional financial assistance to rebuild, to relocate, to continue"—to say to those who have been victims of that operation which is in the nation's defense, the government ignores you: "Your problems are of no concern to us even though you are innocent victims."

And that is the point that we have tried to make in terms of the public agencies, Mr. Wentz and others, in terms of home owners, in terms of businesses. And that, frankly, has riled us. The very day that the announcements were made about what I would call in effect a Federal subsidy, that same day we learned that the request for help for the innocent victims of the May 4th explosion has been denied. There seems an incongruity that is beyond me to understand because we all ought to work together. As the Chairman pointed out: We are one nation. We have an obligation. We are prepared to do our best. But it seems to me we are not being fairly treated.

Mr. VOLKMER. Then you would say—back home, we say, "Just a little old common horse sense," would lead you to believe that if the Federal Government can assist the plants then they surely can assist the people.

Governor BRYAN. That is right.

Mr. VOLKMER. And on the other hand, you do not object to the Federal Government in some way providing so that we can have ammonium perchlorate for our national defense and our space program?

Governor BRYAN. Mr. Volkmer, we do not and I think that most all Nevadans fully understand the seriousness of the sole source of supply for ammonium perchlorate for defense, for space, for the various satellite launch programs that all of us recognize are important. And I do not detect that there is an unwillingness to respond to that national challenge.

What we object to is the unfairness and the fact that there is not a two-way street. In other words, you have told us on the one hand this is a national obligation. On the other hand, you are saying, "But, look, we are indifferent to any problems which may arise as a result of it."

Mr. VOLKMER. I will yield to the gentleman from Wisconsin.

Mr. SENSENBRENNER. I want to follow up on the gentleman from Missouri's question referencing Mr. Peterson's, from FEMA, testimony that says that the Nevada Division of Insurance reports that 11,000 claims were filed, the average claim for home and personal property damage was $3,720 and the average deductible was $233. Apparently that was furnished to FEMA by the Nevada Division of Insurance, which is a state agency. Do you have any information or any documentation that this state agency's information was in error?

Governor BRYAN. No.

Mr. SENSENBRENNER. Because this is one of the keys upon which FEMA has taken the position to date that they will not recommend that the President declare Henderson a disaster area. And it seems to me that the agency that the state has to collect this information for this particular purpose, if the information is in error, it ought to send a corrected report to FEMA as soon as possible, because with this information on the books, I do not think FEMA is going to change their mind.

Governor BRYAN. Mr. Sensenbrenner, are we kind of losing focus of the overall concept? Should not the frame of reference be that whatever the damage that is uncompensated—we are not talking about unjust or having persons who have been compensated by insurance receive a double compensation, but should not the focus and should not the attitude of the Federal Government be that whatever damage is uncompensated, whether it is public property damage, whether it is homeowner damage, whether it is business damage, that there ought to be an effort to try to assist those folks?

Mr. SENSENBRENNER. Well, the disaster assistance program was passed long before I was elected to Congress. The disaster assistance program was not intended to be a Federal Government insurance program. And that is the way it has been administered to this date. If it were a Federal Government insurance program, then what is to prevent a homeowner from buying an insurance policy with a million-dollar deductible? Now, there would not be any incentive to do that. So, you know, that is why the disaster assistance program was not encouraging homeowners to inadequately insure their property.

Governor BRYAN. Sure. And there is certainly no suggestion here on our part. I know that homeowners in Nevada did that, but although ice storms may be devastating in their impact, I would suggest that there is a difference between that which is an act of nature and that which is part of an affirmative Federal policy to support this nation's efforts——

Mr. SENSENBRENNER. But that is not in the Federal disaster assistance law that was passed by Congress in the mid-1970s. And I guess my request is to very simply to get your insurance department data to rebut what FEMA has got from them in the past.

Mr. VOLKMER. I would like to reclaim my time, Mr. Chairman, if you will permit me.

Mr. ROE. I would like you to yield then to the Chair, if you will.

Mr. VOLKMER. Could I have one quick question before I forget, because I have already forgotten once. I do not want to forget it again.

Mr. ROE. Write it down.

Mr. VOLKMER. All right, I'll write it down.

Mr. ROE. There is a very unique situation that exists here. This Chairman did not bring this committee out here to be the arbitrator, although we find ourselves in that position, as to who got wounded, *vis* the point of view whether we owe somebody $200, $300, or $4,000. That, reasonable people ought to be able to decide upon.

Governor BRYAN. Sure.

Mr. ROE. It would seem to me if I were the mayor of this city and I was the Governor, I would have a questionnaire filled out and handed to my people: "Dear Mr. Jones/Dear Mr. Smith: You are in the area, you are one of the 8,000. Here is what we would like to know. Were you insured? How much did it cost? What did you lose? Send us a copy of the bill. We want to appraise that situation."

Now, that seems to me to be one logical way that we would be able to narrow down the accurate cost to the citizens. Too many people roll up their windshields around here. We are not getting the facts. And we cannot deal with this issue unless we get the facts. That is one.

The second point, I think, which makes this so terribly unique—and I shall re-yield back to the gentleman—what makes this so unique is the following point of view. We are going to be asked upon to spend tens upon tens of millions of dollars to re-establish a source of material that is very important to you and me and everybody in this room. And we are coming back and saying that if we are going to do that to be able to establish that particular material, and this is a unique situation where this explosion happened, there ought to be some process in that particular determination—and we are going to ask that of NASA and DOD and FEMA, if we can get to them today, we are going to ask them that as to how can we absolve ourselves from the responsibility of rebuilding the plant to do something for all the people of America on the backs of somebody else. Now, that is a conscious decision. That is not a disaster decision. That is the difference in this case.

So, if we are going to be rebuilding and we are talking about moving onto Federal lands, we are talking about moving there or doing—that is not the issue. The issue is what do we do in that process, not necessarily the insurance process of FEMA, what do we do in that process to make this community and the state whole?

And that is what the real question is that we are going to get to before this is over and that is what I want to stress.

So, I think that this unique situation—I have a disaster in my district like five times every year on the basis of a flood situation. That is God-given. That is a thing that we did not have any determination on. But we do have a decision to make as to where that plant will be located and how it will be run. That is a conscious decision made by the Government. That is the difference between these two issues in my judgment. So, I hope that all of us can hold that in mind, is that the decision that has to be made, and I think it is going to take legislation to be able to do it. I do not think FEMA can resolve this matter alone under the legislation that it has.

The Chair yields now back to the distinguished gentleman from Missouri, Mr. Volkmer.

Mr. VOLKMER. I do not want to take up all the time, we have got a lot of witnesses today, but, Governor, you mentioned earlier that someone from FEMA had led you all to believe or your agency, the Governor's Office or one of your staff of the Emergency Agency or somebody, that the deductible would be payable. Now, this is something that as the gentleman from Wisconsin said, and I from Missouri, along the Mississippi River, we have a lot of floods, have never known it to be payable on the deductible. I would like to know who with FEMA, if you can, if not today sometime in the future——

Governor BRYAN. I would be happy to.

Mr. VOLKMER [continuing]. So we can have it for the record, informed you or led you to believe that that deductible would be payable.

Governor BRYAN. I would be happy to, Mr. Volkmer.

[Governor Bryan's office submitted the following letter in response to Mr. Volkmer's request:]

STATE OF NEVADA
DIVISION OF EMERGENCY MANAGEMENT
Capitol Complex, 2525 S. Carson Street
Carson City, Nevada 89710
(702) 885-4240

RICHARD H. BRYAN
Governor

ROBERT R. KING
Director

July 29, 1988

MEMO

TO: Governor's Office
Michael Boisvert

FROM: Bob King, Director, DEM

SUBJECT: GOVERNOR BRYAN'S TESTIMONY
HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY

In response to your request for information relating to the Governor's testimony:

Page 57: The Governor quotes from 44 CFR Section 205.35, Par (b)(1).

Page 74: INSURANCE DEDUCTIBLES: Consideration of deductible amounts under FEMA administered disaster programs spans the public and private sectors. The programs involved are the Public Assistance Program and the Individual and Family Grant Program. In the PA Program, insurance deductible amounts are always considered. In the I&FG Program, insurance deductible losses are not excluded from consideration.

These principles were understood by Nevada officials and that understanding was reconfirmed as being correct with Mr. Glen Garcelon and Mr. Bruce Baughman, Disaster Assistance Program, FEMA headquarters, as recently as 6/24/88, just prior to Governor Bryan's testimony before Congressman Roe's Committee. Mr. Garcelon and Mr. Baughman work directly, on a day-to-day basis, with the PA and I&FG Programs at FEMA headquarters and are especially well versed in the details of program administration. Both were in Henderson supervising the damage resurvey on 6/24/88 and so were available for consultation to Nevada officials on the subject of insurance deductibles.

We fully understand that aid to disaster victims either through SBA loans or FEMA grants is, in the final analysis, dependent on serious needs demonstrated in individual cases. Insurance deductible losses may or may not be a significant factor in a given case depending, first on the program being applied to the case and, secondly, on the circumstances of that particular case.

As Mr. Garcelon pointed out, in the case of the IFG Program, if being out-of-pocket for necessary expenses not covered by insurance (i.e. a deductible amount) contributes to the overall inability of a family to overcome a disaster related hardship it may be considered to be part of the "serious need" which is a prerequisite of the I&FG Program. This is consistent with the program's purpose which, stated in part, is to permit individuals or families "to meet those disaster-related necessary expenses or serious needs for which assistance from other means is either unavailable or inadequate" (44 CFR, Section 205.54, Par (b)).

RRK:mlg

Mr. **Bilbray**. If the gentleman would yield?

Mr. **Volkmer**. I will yield.

Mr. **Bilbray**. I think that even in my office situation, we were given the guidelines from FEMA which said that the items that were not insured would be covered. It did not specifically say this excludes the deductible. And I think that is probably where our confusion started at that point. I think the noncoverage of deductibles is something that we should look into for the future. I think it is important because even in the sense of Kerr-McGee, Kerr-McGee has a $1 million deductible and, by the way, we found out that Kerr-McGee has a $300 million liability insurance. So, that is what they told me yesterday.

So, they have a $1 million deductible and they had $500,000 in losses for damage to their structure. That is just loss to them. They have to pay that $500,000. When you add up all the deductibles, including that, the school districts, everybody else's, we have a tremendous amount of loss in this community and it is unfair that the deductibles are not covered because I know in my residences—my residence in Paradise Valley, I was told by my insurance company that they would not write a policy for me that did not have a two or a three-hundred glass deductible. They would not write it for me. So, I had to take it. It was not a choice that I wanted to pay a cheaper premium to get that particular policy because of the deductibility. They would not give me a deductible—a non-breakage of glass deductible. And I think that is true of most people in this community. And I think the losses are a lot more staggering than anybody even anticipates. And I think there is a lot of people that have not even to this date have filed claims because they do not even know the extent of their damages.

Mr. **Roe**. The Chair recognizes the distinguished gentleman from Missouri, Mr. Buechner.

Mr. **Buechner**. We are back to this problem here.

[Pause.]

It's a Republican microphone.

You made a statement, I think we all in political life deal with the question of reactive versus proactive. And you mentioned that the ammonium perchlorate is not on the hit list, so to speak, the dangerous product list that the agencies have. Had it been on that list, what—prior to the explosion, what would your state have done, if anything?

Mr. **Miller**. In this instance, we were pretty much aware of the ammonium perchlorate that was out in that particular facility. So, I do not know if it would have made a practical effect. I gave it to you for the point of showing that the SARA Title III requirements deal only with hazardous materials. They do not deal with explosives. And there is some question in ammonium perchlorate if it even falls in either of those categories. It is generally categorized as an oxidizer which, of course, leads to the questions of how it exploded and the concerns that were raised by the Governor and others earlier.

We were aware of what was there. The changes are those things that we are looking at now from a prospective vantage point since at that time it appeared by most of the experts' opinions, that it would not explode in the fashion that it did.

Mr. **Buechner**. Mr. Wentz, I know that you mentioned, first of all, amazingly, what happened that the school children were able to avoid the tragedy that could have occurred. I think it is a compliment to your school district for having it prepared for evacuation. But when we spoke yesterday at St. Rose de Lima Hospital, one of the doctors talked about the number of children that are anticipated to still have psychological reactions, the ones that are currently being treated. Does the school district have an ongoing program? You talked about a trauma response team, but what are you able to do in-house? Does the State of Nevada have any kind of ongoing program, the Department of Mental Health or whatever the appropriate agency is, that you are able to do right now in anticipation of the reopening of school?

Mr. **Wentz**. I cannot speak to the state on that issue, Mr. Buechner, but I can say that our crisis intervention team is an ongoing team. It is there. And as I pointed out, its primary responsibility is working with the staff who have to work with the children.

It is, I think, obvious that 6 psychologists and 2 nurses in a school district of 100,000 students, 125 schools, but even focused in this particular area, is not sufficient. We will, in fact, be following up, but there are additional resources that we hope to be able to coordinate with the community.

I know that when the emergency first happened, American Nevada [10] Corporation announced in a full-page ad its efforts to try to assist families and children and adults, as well. So, I think it is going to have to be some kind of combination. We do not have sufficient resources. And we anticipate individual and group activity that it is going to be necessary.

Mr. **Buechner**. You may not know the answer to this, maybe someone from the trauma team would, but were disaster declaration to occur, there is provision in there for mental health counseling type of facilities. Where would those people come from? Do you know?

Mr. **Wentz**. Well, there are those that are related to state agencies and, certainly, we could combine some of those. There are those within the school system. If it provided some additional resources, we would certainly look outside of the area to bring in new resources, even though it be, maybe, on a temporary basis. You can bring teams in from various places to respond to those.

Mr. **Buechner**. Governor, last question. I know we have got a lot of people here to testify, but in the application that the letter to FEMA, you pointed out a 25 percent match; I think the state was going to pick up 7 percent. Is that correct?

Governor **Bryan**. We were prepared to pick up whatever the federal requirement was. I believe it was a commitment of $705,000, it seems to me.

Mr. **Buechner**. That would have been the state share?

Governor **Bryan**. Yes, that is correct.

Mr. **Buechner**. And then the rest of that 25 percent match would have come from the county and the City of Henderson.

Governor **Bryan**. It would have been a joint participation.

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[10] American Pacific Corporation, parent company to the Pacific Engineering and Production Company.

Mr. **Buechner**. Well, let us just have a scenario. Let us say FEMA just shuts the door on you and you do not reach the criteria level. What—you mentioned special session—would that have to be the way in which the state would even give minimal—the amounts of money, say, that would have been your match?

Governor **Bryan**. I should think that it would because if our numbers as developed by Bloomquist [11] and others in the City of Henderson are accurate, conceding that for a moment, we are talking about over $20 million. The state could not begin to respond.

Mr. **Buechner**. Just that first amount of money of the match, you do not need a special session for that $700,000?

Governor **Bryan**. No, because we have a provision for a contingency fund that we can turn to and we can handle that within the framework of the day-to-day operation of state government.

Mr. **Buechner**. I just want you to know the sympathy we all have. I have Times Beach [12] in my district. I do not know if everybody knows about that. One of the biggest problems we had was convincing people that their homes in Times Beach were not worth as much as they thought they were worth when they wanted to move to the next community. And that is a serious problem. At least your people have their homes and, thank God, most of them have their lives.

I have one more question. The FEMA statement says the total combined response—this is the value—of the state and effective local government was only $53,300. Would you dispute that number?

Governor **Bryan**. If you are talking out-of-pocket expenses.

Mr. **Buechner**. Right. I think that is like overtime and things like that for employees for disaster response.

Governor **Bryan**. We have our emergency management people that may be able to respond more directly. I am not in a position to——

Mr. **Buechner**. This goes back to the problem we have that if that is an inaccurate number, we need to have that revised as part of the formula to move you over the threshold.

Governor **Bryan**. We are talking, I think, in that number simply the overtime; some 13 state agencies responded the night of the disaster in terms of the National Guard, the Highway Patrol. Those are the kinds of expenses that were incurred at that time.

Mr. **Buechner**. Lastly, Mr. Wentz, I knew you left St. Louis because it was too hot. Excuse me. I guess, humid. When I go back home and tell people that we got to fly in a helicopter when it was 111 degrees, shall I tell them it was a dry heat?

Mr. **Wentz**. Right. [Laughter.]

Mr. **Buechner**. Thank you.

Mr. **Roe**. The Chair recognizes the distinguished gentleman from California, Mr. Konnyu.

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[11] Mr. Gary Bloomquist, City Manager, City of Henderson, Nevada.

[12] Times Beach, Missouri, was determined to be heavily contaminated by the chemical dioxin. The Environmental Protection Agency provided funds for compensating and relocating homeowners on February 22, 1983.

Mr. **Konnyu**. Mr. Chairman, I have no questions. I am going to be here this afternoon and I will have a chance to ask more than my share of questions.

Mr. **Roe**. Okay. Real fine. Are there any further questions of the members of the panel?

If not, we want to thank you, Governor. I do not know what is the matter with these microphones, but there is something wrong.

Mr. **Volkmer**. Could I ask one?

Mr. **Roe**. The gentleman from Missouri.

Mr. **Volkmer**. I would like to ask, Mr. Arrendale, a simple little question of you and the people up at Green Valley. When you moved up there, you never expected this plant to explode, did you?

Mr. **Arrendale**. Sir, when I moved there, I was told it was impossible for ammonium perchlorate to explode.

Mr. **Volkmer**. Who did you ask that question?

Mr. **Arrendale**. I asked the people at PEPCON. I happened to be present when a local artist by the name of Roy Purcell hung some beautiful art work there,. over $100,000 worth. I assisted him in taking it in.

Mr. **Volkmer**. This was at PEPCON?

Mr. **Arrendale**. At PEPCON.

Mr. **Volkmer**. And what year was this?

Mr. **Arrendale**. This was approximately two and a half years ago. And I asked that question at that time and I was told—and I do not remember a name, but I was told that it was impossible for it to explode.

And if I may add one thing to that? When Kerr-McGee safety inspection team concluded their inspection of Kerr-McGee, they said that it was "improbable." I like "impossible" better, but we know that it is not true.

Mr. **Volkmer**. Thank you very much. Thank you, Mr. Chairman.

Mr. **Roe**. We want to thank the witnesses, the Governor and Lieutenant Governor and all our other witnesses for a very splendid presentation. We appreciate you being with us this morning.

Our next panel will be the federal agency officials and we have with us Rear Admiral Richard M. Truly, who is the Associate Administrator for Space Flight, National Aeronautics and Space Administration. And also accompanying him is Mr. Daniel S. Rak, who is the Deputy Assistant Secretary of the Air Force for Acquisition Management and Policy.

The Chair recognizes the distinguished representative from NASA, Rear Admiral Richard H. Truly.

STATEMENT OF REAR ADM. RICHARD H. TRULY, ASSOCIATE ADMINISTRATOR, OFFICE OF SPACE FLIGHT, NASA

Admiral **Truly**. Thank you, Mr. Chairman. And, if I may, may I submit my written comments for the record and summarize them.

Mr. **Roe**. The gentleman asked to submit his written comments for the record. Hearing no objections, so ordered. The gentleman is recognized.

Admiral **Truly**. Mr. Chairman, I would like to say at the start that I welcome the opportunity to join you here in Nevada on this important hearing to the people here and also to NASA and the space program.[13]

I hope very much and wanted to not delegate this responsibility[14] because I wanted personally to come out here and say a couple of things that I said in your previous hearing of a couple of weeks ago.

Mr. Roe. Ladies and gentlemen, I would have to ask you to, if you have got discussions, please take them into the hall. We are here to hear our witnesses. The gentleman is recognized.

Admiral Truly. Thank you, Mr. Chairman. I just wanted to repeat a couple of things I said at the start of the last hearing that you held in Washington and that was to recognize that this community has suffered a loss of life, injury and suffering, and NASA and my personal compassion to the people who have been through this event is one that means much to me as I execute my responsibilities.[15]

I am particularly touched by the testimony that I have heard previously. Based on my experience in the last two years, since just after the Challenger accident, I have been leading the space shuttle effort to come back[16] to flight. And I have dealt with you and many others with the difficult issues, the Gordian, untying the Gordian[17] Knot[18] of difficult issues that concern accidents, safety, getting the facts out and so that cool heads can determine the course of action.

In the previous hearing, also, Mr. Rak and I pointed out that this explosion destroyed approximately half of America's supply of ammonium perchlorate. I pointed out that the space shuttle system is the largest single user; one flight, as Governor Bryan mentioned, uses 1.7 million pounds. However, there are many, many other important national uses. The space shuttle lost two flight sets of AP in the PEPCON explosion. Further, most expendable launch vehicles and DOD systems that Mr. Rak can speak to better than I, both tactical and strategic, use this critical component. And, of course, our responsibility is to assure that these national needs are met in an equitable and safe manner.

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[13] Admiral Truly amended this sentence to read: "Mr. Chairman, I would like to say at the start that I welcome the opportunity to join you and the people here in Nevada on this important hearing and also to NASA and the space program."

[14] Admiral Truly amended this to read: "I did not want to delegate this responsibility. . . ."

[15] Admiral Truly amended this to read: ". . . life, injury and suffering, and I and NASA want to extend our compassion to the people who have been through this event. Doing this means very much to me as I execute my responsibilities."

[16] Admiral Truly changed "come back" to "return."

[17] Admiral Truly deleted both instances of "Gordian."

[18] Admiral Truly alludes to a famous episode from the epic campaign conducted through Asia by Alexander the Great of Macedon:

"From Xanthus, half the army campaigned farther through Lycia and punished the rich city of Aspendos, whose river mouth had often harbored large Persian fleets. Then, they turned north inland through Phrygia to rejoin their fellow soldiers, who were wintering-over at Midas's ancient Phrygian capital of Gordium. . . . At Gordium, word reached Alexander of a local curiosity. It was welcome after the rigors of winter on the Lycian coast, spent at the mercy of the local contacts, perhaps of Nearchus the Cretan and Aristander of Caria or Lycia. There was a chariot in the old Phrygian palace whose knot of cornel bark around its yoke had never been undone by any man. Cornel was the wood of the sarissa, Midas and the Phrygians, the subject of myth and legendary settlement inside Macedon herself. Aristander the prophet was interested in the story, so Alexander saved it as a display for his men. Shortly before departing from Gordium, he went up to unravel the knot. Failing, he drew his sword and slashed it, a trick that was explained away by his aged historian Aristobulus. Publicity contrived the sequel. 'There were thunderclaps and flashes of lightning that very night.' Alexander sacrificed to Zeus to thank him for the sign. Callisthenes and rumor went further. Like the Xanthus tablet, the Gordian knot was a sign that its cutter, Alexander, was destined to 'rule all Asia.'" [Robin Land Fox, *The Search For Alexander* (Boston: Little, Brown and Company, 1980), pp. 159–161.]

Alexander's solution is now the apotheosis of solving an extremely difficult problem by direct action.

Since your last hearing, there has been significant progress, in my view, in a number of events in just the last, I forget, week and a half or two weeks since your previous hearing.

Through the cooperation here in Henderson, the Kerr-McGee plant opened on the 13th of June, I believe. And, in recognition of the criticality of the space shuttle recovery, the first priority, and the work that they have been doing out there as a first priority, is what they call cross-blending of ammonium perchlorate to provide the fifth flight set worth of this oxidizer to the space shuttle program. And I would like to touch on that in just a moment.

I know that there has been a great deal of work to make their operation a safe and an efficient one. I know that there has [19] been many discussions here in Henderson, and with the Clark County Fire Department and the company. But to open that plant is a major achievement from our point of view, and it also does start moving that inventory, taking the steps to move the inventory out of the plant into the users, which I think is a positive step for all concerned.

Also, I had the opportunity, along with Dr. Fletcher, the Administrator of NASA, and the Secretary of the Air Force, to brief Governor Bryan in the White House on the 16th of June. We—[20] I had the opportunity to give him a status of all of [21] [22] our programs. I think it was a good and forthright meeting. He expressed many of the concerns to Dr. Fletcher and Secretary Aldridge that he did this morning. And I profited by his insights as to some of the problems as he saw them. And we have tried to take action or assist wherever we could.[23]

We also, I believe, have made good progress in assisting PEPCON to, if they can,[24] to rebuild their capability so we can meet the national need. I want to point out, however, that I think there is a misconception about the financial arrangements with our efforts of assistance, and I would like to touch on that very briefly.

Both of these companies, Kerr-McGee and PEPCON, are not on direct contract to the government. They are subcontractors.[25] They are subcontractors to one of our primes, Morton Thiokol in Utah. And, so,[26] the agreement with them is actually between Morton Thiokol and the companies. A rebuilt plant will depend on the company's ability to raise the money privately through loans. And if they,[27] in fact, cannot, the plant under the present strategy will simply not be built.

That new capability of PEPCON will be located or is planned to be located outside of Henderson.[28] Also, there are active discussions underway with Kerr-McGee as, first of all, to their current operations, of their future corporation plans and the potential of them also building an additional capability to be located outside of Henderson for the production of AP. That also will [29] be using funds that are privately raised, but we are giving them whatever assistance that we can in that procurement because of the national need and the fact that these two suppliers are the only two suppliers of this critical product.

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[19] Admiral Truly changed "has" to "have."

[20] Admiral Truly deleted "We—"

[21] [22] Admiral Truly deleted "of."

[23] Admiral Truly amended these sentences to read: "I profited by his insights as to some of the problems as he saw them; we have tried to take action or assist wherever we could."

[24] Admiral Truly deleted ". . . to, if they can, . . ."

[25] Admiral Truly deleted "They are subcontractors."

[26] Admiral Truly changed this to "So, ..."

[27] Admiral Truly changed this to "If they, ..."

[28] Admiral Truly amended this sentence to read: "That new capability of PEPCON is planned to be located outside of Henderson."

You also asked in your letter to Dr. Fletcher that NASA comment a little bit about the allocation process of ammonium perchlorate, and I would like to touch on that briefly, also. NASA is continuing to work with other agencies, the Department of Defense, our civil space program, the commercial space program, and also some of our allies to sort out the difficulties with a reduced supply and a larger demand, particularly in [30] next year. There is some inventory now, as I said, and the best way I think to solve the local problem and solve the consumer problem is to,[31] in a safe manner, get that inventory processed and out to the customers.

I mention that the first priority when the plant opened was the next flight set of the space shuttle, but we have a great deal to do in this continuing allocation process. Once that Shuttle flight set is delivered, the next priority will go to a Department of Defense need.

We have lost no flights of the Space Shuttle to date because of the allocation process although I must tell you that the two flight sets that we lost at PEPCON make it very problematical as to whether or not any Shuttle flights in the next year or year and a half will be lost. We are still working that. And I am encouraged by some of the workarounds that are going on, after the delivery of the AP, but that issue is also still up in the air.

I see the real allocation problem, the real crunch, to come in the year 1989 and that reflects, at least for space shuttle, into [32] flights for 1990. And that is the reason it is so important that we assist in getting an additional supply in a safe manner and in a safe place and under the correct allocations because with only one plant, we simply cannot meet the projected demand of the space shuttle program, the expendable launch vehicles, the commercial industry and the Department of Defense.[33]

You also asked about [34] in your letter to Dr. Fletcher about NASA's strategy for the use of expendable launch vehicles—which use less ammonium perchlorate than the Shuttle—for [35] to potentially offload, if you will, certain missions from the Shuttle.

I think it is premature—it is impossible for us to really have an alternate plan,[36] but I would make it very clear to get on the record, as we have in Washington in your hearings, that I think it is of the utmost importance that the mixed fleet, NASA's strategy of the Space Shuttle to fly missions that require man, is balanced by an appropriate number of expendable launch vehicles where man is not required. From the point of view of this AP situation, I think it is very important that that mixed fleet proposal be supported by the Congress as it was by your committee because it is true that those expendables, for a given payload weight, do use less AP than the Shuttle does. And, so, for the moment at least, my response on expendables is that I think we still have the right strategy in place with the mixed fleet. When we further better understand the Space Shuttle situation, we might want to change that strategy. And I am working on some options there, but that is the status as of today.

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[29] Admiral Truly changed this to "That will also. . . ."

[30] Admiral Truly deleted "in."

[31] Admiral Truly deleted "to."

[32] Admiral Truly deleted "into."

[33] Admiral Truly amended this sentence to read: "And that is the reason it is so imporant that we assist in getting an additional supply in a safe manner. Because with only one plant, we simply cannot meet the projected demand of the space shuttle program, the expendable launch vehicles, the commercial industry and the Department of Defense."

[34] Admiral Truly deleted "about."

[35] Admiral Truly deleted "for."

[36] Admiral Truly amended this to read: "It is impossible for us to really have an alternate plan, ..."

Mr. Chairman, I would like to close my remarks with one final observation, if I may. Yesterday, I was in Alabama all day at a Space Shuttle Management Council Meeting looking at the recovery of the Space Shuttle in the next flight. And just over two months from now, we are going to be flying the next flight of the Shuttle and we have been down, as everyone knows, since the Challenger disaster of over two years ago.

Last night at the Kennedy Space Center, we lifted the Discovery orbiter off the floor and [37] with the crane to be attached to the solid rocket motors and expendables. It will roll out to the pad in about a week and, as I said, just over two months from now we will be flying again.

That leads to a series of flights [38] that, because of this downtime, carry our most precious national payloads. And the connection that I wanted to make is that that fifth flight set of AP that is being today worked on in Henderson, Nevada, is not just a number on a piece of paper or a viewgraph of something.[39] It is headed for a satellite. The satellite's name is Magellan. It is named for an explorer. This particular mission is an exploration mission pointed at a launch window that it opens so that we can lift off in the Shuttle in late April of next year and send Magellan on its mission to the planet Venus.

Aboard the Magellan spacecraft is a radar that will look down at Venus through the clouds and map the surface. This is the only nation in the world on Earth that has the technology and capability to have a civil space program and have a mission to go out and explore the outer planets. So, your hearing here today addresses a very difficult, important issue to NASA and to the DOD as we make this recovery. It points up [40] the difficult challenges that you, we and the citizens here have, the sacrifices that it takes to have achievements such as this. And I believe the urgency to achieve success not only here in Henderson, Nevada, but across our land, for the magnificent results that occur because of these sacrifices.

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[37] Admiral Truly deleted "and."

[38] Admiral Truly amended this to read: "That flight leads to a series of missions. . . . ."

[39] Admiral Truly amended this sentence to read: "And the connection that I wanted to make is that that fifth flight set of AP that is being worked on today in Henderson, Nevada, is not just a number on a piece of paper or a viewgraph."

[40] Admiral Truly changed "up" to "out."

Since this explosion here on the 4th of May, we have[41] NASA has attempted to work with all the other agencies and be as responsible as we can. And we certainly intend to try to help where we can. And[42] I would be pleased to answer any questions later that you may have. Thank you, sir.

[The prepared statement of Admiral Truly follows:]

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[41] Admiral Truly deleted "we have—."

[42] Admiral Truly deleted "And."

NASA
National Aeronautics and
Space Administration

Hold for Release Until
Presented by Witness

June 24, 1988

Subcommittee on Investigations and Oversight

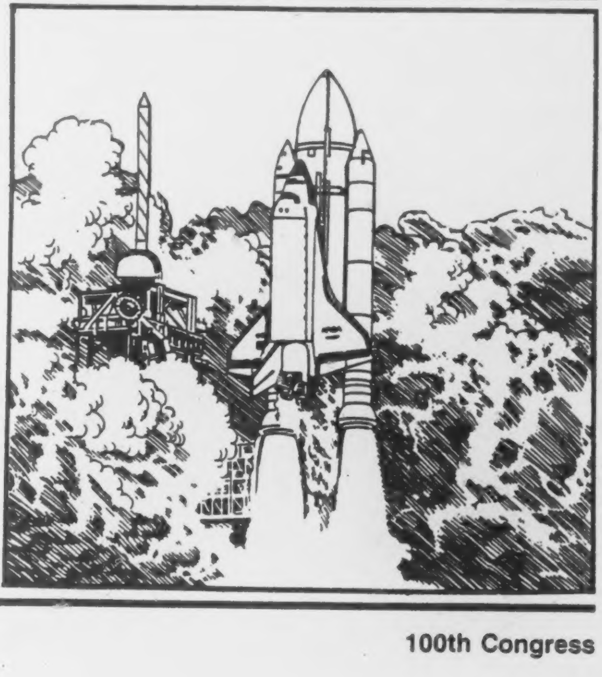
Committee on Science, Space and Technology

House of Representatives

Statement by:

Richard H. Truly

Associate Administrator
for Space Flight



100th Congress

HOLD FOR RELEASE UNTIL
PRESENTED BY WITNESS

Statement of

Richard H. Truly
Associate Administrator
Office of Space Flight

National Aeronautics and Space Administration

before the

Subcommittee on Investigations and Oversight
Committee on Science, Space and Technology
House of Representatives

Mr. Chairman and Members of the Subcommittee:

I welcome this opportunity to join you in Nevada to review the circumstances resulting from the destruction of the Pacific Engineering and Production Company (PEPCON) plant in Henderson. The loss of life, injury, and suffering the accident brought to this community evoke not only our heartfelt compassion, but our dedication to insure safe operations in future production.

NASA is an integral part of the ammonium perchlorate (AP) allocation process, and we greatly appreciate the support and assistance extended by the Governor and the people of Nevada. Since my testimony to this committee on this subject earlier this month, we have made significant progress in mitigating the effects of the accident. The resumption on June 13, 1988, of production at the Kerr-McGee Chemical Corporation was an important first step. A Kerr-McGee augmentation facility outside of Henderson, and a rebuilt PEPCON production facility also outside the city, are also vital to the recovery plan.

The Space Shuttle Solid Rocket Motor (SRM) is the largest user of AP, with over 1,700,000 pounds required per flight set. Furthermore, most expendable vehicles also use AP for solid propellants. These include the Titan III, Titan IV, Delta II, and Scout booster systems. NASA's requirements are a significant portion of the North American demand — about 38 percent, for example, in calendar year 1989. Since our requirements must be prioritized among other users of this fixed resource, it is difficult at this time to project the long-term impact with great specificity. Space Shuttle SRM production is assured through the fourth flight set. This includes the Qualification Motor -8 and Production Verification Motor -1 full-scale static test firings which are requisite to SRM certification before the Space Shuttle can return to flight. AP was essentially completed for the fifth and sixth flight sets and was on hold at PEPCON for rescreening and reblending before shipment to Morton Thiokol. Both those flight sets were lost in the explosion. AP for the fifth flight set is presently being cross blended at Kerr-McGee and will subsequently be shipped to Morton Thiokol. Unless the prioritization and allocation plan affects Kerr-McGee's delivery to Morton Thiokol through the end of calendar year 1988, NASA will potentially have AP for an additional five flight sets.

It appears that the available AP inventory and Kerr-McGee's production capacity during 1988 will make AP allocation and production scheduling a difficult but achievable task to meet most of the national requirements. However, calendar year 1989 and subsequent years will be highly problematic until a new production capability comes on line. Remanifesting and delay of some Space Shuttle flights are probable. Critical to the post-1989 impact on the Space Shuttle and expendable launch vehicle programs are continued Kerr-McGee production, its augmentation facility, and a reestablished capability at PEPCON. Until specific production schedules and capabilities are established and resource allocations are determined, NASA cannot accurately predict impact to future programs. We shall continue to work closely with the other users in assessing the situation and developing a recovery strategy. The advice and guidance of this Committee, and the continued support of the people of Nevada and their elected officials, will be essential to our efforts to restore American preeminence in space.

Mr. Chairman, this concludes my formal testimony. I will be pleased to answer any questions you may have.

Mr. Roe. The Chair recognizes Mr. Rak. Thank you.

STATEMENT OF DANIEL S. RAK, DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE, ACQUISITION MANAGEMENT AND POLICY

Mr. Rak. Thank you, Congressman Roe. I appreciate the opportunity to speak with you here in Henderson and review with you the progress that we have made in this ammonium perchlorate situation.

Mr. Roe. Can you pull that microphone up? I am sorry to keep saying that, but it is awfully hard to hear you.

Mr. Rak. I have no prepared statement, but I do have a few opening remarks which will describe and reiterate some of the information which I did previously, as well as to bring you up to date on some of the things that have occurred since our meeting with you in Washington two weeks ago.

The explosion on May 4th at the Pacific Engineering and Production Company, which we refer to as PEPCON, virtually destroyed—and as has been pointed out—one of only two U.S. suppliers of ammonium perchlorate. And it interrupted the production at the other, Kerr-McGee Corporation here in Henderson. PEPCON, as has been indicated, represented approximately one-half of the U.S. capacity for the production of ammonium perchlorate. This created a serious national problem because ammonium perchlorate is an essential ingredient in the manufacture of solid propellant rocket motors. It is used in virtually every solid rocket manufactured in the United States. These solid rocket motors power our space program, including the Space Shuttle, our Titan and Delta space boosters, expendable launch vehicles, two legs of our strategic defense triad, both the Peacekeeper and the Trident missiles,[43] strategic missiles and a multitude of tactical missiles used by all military services, the multiple launch rocket system used by the Army and our own air-to-air medium range missile, the AMRAAM.

It is obviously imperative, therefore, that the United States have an adequate industrial base for this product. On May 5th, 1988, the Air Force initiated an effort through the Defense Priorities and Allocation System structure to begin to collect requirements data in anticipation of the expected shortage that was to occur because of the explosion here in Henderson. On May 6, the Under Secretary of Defense, Acquisition,[44] designated the Air Force to lead the DOD efforts to address this loss of capacity.

On May 9th, 1988, the Air Force, acting for the Department of Defense, joined with NASA to initiate action to recover the U.S. industrial base and manage the existing supplies and future production of the product. Within two weeks, both PEPCON and Kerr-McGee requested an opportunity to present proposals to restore production capacity. PEPCON presented its proposal on May 16th, 1988, and Kerr-McGee presented its proposal on May 18th.

On May 20th, the Ammonium Perchlorate Advisory Group, which I chair, was formed. It is comprised of representatives from the Office of the Secretary of Defense, from the National Aeronautics and Space Administration, the Army, the Navy and the Air

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[43] Mr. Rak deleted "missiles."

[44] Hon. Robert Costello.

Force. During the next two weeks, this group reviewed capacity and demand projections, examined alternatives and developed a recommendation for restoring our production capacity as expeditiously as possible.

Throughout this period, under the auspices of the National Security Council, we have been in touch with the Departments of Commerce and Transportation to assure consideration of commercial space launch needs.

On June 3rd, one month after the incident, the Under Secretary of Defense for Acquisition and the Associate Administrator of NASA, Admiral Truly, accepted our recommendation and discussions were begun which we believe will insure prompt restoration of our industrial capacity. And [45] Admiral Truly has indicated that concrete progress has been made both with PEPCON and with the Kerr-McGee Corporation to accomplish this recovery plan.

A principal concern throughout our review has been safety. Safety of the local community and safety of the production workers and the safety of the plant, itself. We applaud and we support the responsible actions of all of the state and local officials taken here in this area to assess the safety at the Kerr-McGee plant. And we also commend the cooperation which we believe has been extended by the company officials to take steps to adopt those recommendations which have been made to improve safety at the only existing facility for the production of ammonium perchlorate.

Through a unique combination of civilian and military agencies, and with the cooperation of the only two U.S. producers of ammonium perchlorate, we have set in motion in less than a month a course of action which will not only recover our industrial capacity in the shortest possible time, but minimize the length and the extent of our shortfall.

Now that the Kerr-McGee plant has reopened here in Henderson, although there will be delays in product deliveries, and there will be disruption to motor production schedules, we expect to be able to satisfy all known calendar year 1988 AP requirements. And if the construction of the new facilities as contemplated in our recovery plan is completed as scheduled, we can reduce the shortfall in calendar year 1989 to less than 3 million pounds of ammonium perchlorate.

Our recovery plan envisions that PEPCON will build a 30 million pound per year plant at a new site outside of Henderson, as Admiral Truly has indicated, and that Kerr-McGee will expand its capacity by 20 million pounds per year, also at a site outside of the local community.

Both companies will privately finance this capital investment. The investment will be amortized over sales to all customers during a five to seven-year period by applying a charge to each pound of ammonium perchlorate which is sold. The charge [46] this charge will be predicated upon purchases being at a minimum of 20 million pounds per year from each company.

Should sales not materialize—and that is highly unlikely and not expected based upon our projections of demands over the next five to seven years—the balance would be payable at the end of the period.

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[45] Mr. Rak deleted "And."

[46] Mr. Rak deleted "The charge—."

Also, if demand for AP should indicate we can consider an additional facility being constructed. We have also established, since we have met previously, a panel under this ad hoc advisory group to which I have referred, to review the needs, the schedules and the program impacts and to allocate AP among the various programs. As has been indicated—well, I should say first that this panel is chaired by the Director of Industrial Resources in the Office of the Secretary of Defense [47] and has representatives on it from both—from NASA and all the military services—we have made an initial directive establishing the Shuttle solid rocket motor as the first requirement to be processed. And since this is nearing completion, the Titan 34D program has been identified as the next requirement to be processed.

We hope to be able to establish and publish a processing schedule for the balance of the calendar year 1988 by the middle of July.

I, in conclusion, have personally been impressed by the commitment and the cooperation displayed by the members of the Advisory Group and the two U.S. ammonium perchlorate producers, and the thoughtful consideration given by the citizens of this community. I believe this is an example of Americans from both the private and public sector and the local community working together to resolve a critical national problem. Thank you, Mr. Chairman.

Mr. Roe. I thank both of our distinguished witnesses for being with us this morning to testify. I would like to ask a series of questions. Fundamentally and basically, the discussion of the insurance coverage is before the people of this community. And you both have given an eloquent presentation and most timely—and most important, up to date. And we are talking about what we are going to be doing to respond to the need as far as our national defense is concerned, as far as NASA is concerned and our flight into space.

There is one thing that bothers me, however. And the thing that bothers me—and Admiral Truly, see if I am coming from the right direction. You make the point, now, the second time, that actually that it does not have to do with the Federal Government, it has to do in effect with an agreement by the Thiokol Company who is, in effect, negotiating and working with both PEPCON people and the Kerr-McGee people. Is that a correct observation from my point of view?

Admiral Truly. Mr. Chairman, it has very much to do with the Federal Government. I just wanted to make the point that just like other Federal agencies, when we have to resolve issues or problems, we do have to do them in the context of the contracts we have and the contractual laws and the acts that are on the books. And I just wanted to make the point that even though we have worked very hard, as Mr. Rak has said, together, to assist the companies and tried to come up with a U.S. Government strategy as to how to resolve the situation, the mechanism for that has to be accomplished through the fact that the contract is between one of our primes and——[48]

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[47] Hon. Richard Donnelly.

[48] Admiral Truly deleted "and."

Mr. ROE. I understand. I want to get on the record a very clear point. I think everybody agrees the purpose of our being here is we have a unique situation. And everybody is dumping on FEMA. There are laws to deal with as far as FEMA is concerned. That does not mean they get off the hook, either. But there is an overriding responsibility, as you have both eloquently pointed out, in the interest and the needs of the American people, *vis-a-vis,* our defense and our space program. Is that a fair commentary to make? And you are expressing the wonderful relationship here of private industry and government and citizenry working together. And we are complimenting the good people of Henderson for their patriotism and, therefore, for all of our patriotism to get ourselves back into flying, which we all applaud. Is that fair? Am I saying anything that is not correct?

Now, what puzzles me, we talk about the privatization of these two funds that are going to be handling this situation with private capital. Now, they are not going to be able to raise the private capital unless they have a customer. And the only customer they have at the moment is the United States of America—both in the defense area and in the space area. And to our NATO allies. Therefore, there was not a broad customer relationship whatsoever in the country, much as the need is important. Is that a fair commentary?

Admiral TRULY. There are commercial customers, also.

Mr. ROE. Well, the gentleman is correct. What we are trying to do through the efforts of this committee is to promote commercial launching facility programs and there will be commercial users, too. But, however, if we are short of material—the point of view of what the allocation would be under Presidential allocation. And that is a fair commentary too.

Now, let us take that point of view. We are talking under this contract how are we going to get these private entrepreneurs to raise that money? They have to have a customer and they have to have something to sell. If their customer is the United States Government, they are coming back and saying that through the Thiokol contract, that previous arrangement, we will provide a surcharge to make up these particular costs. In effect, a Federal guarantee. Is that a correct point to make?

Mr. RAK. The ammonium perchlorate contracts between Morton Thiokol and Kerr-McGee and PEPCON prior to the accident and in place did, in fact, have a surcharge per pound of propellant——

Mr. ROE. I know.

Mr. RAK [continuing]. . . . that was added to all customers whether they were foreign or domestic, commercial or government. And it was through that surcharge that they were able to previously expand the plant, in the last expansion that went on several years ago. And in that procedure was chosen as the most equitable and efficient way——

Mr. ROE. I am not even questioning that.

Admiral TRULY. If I may expand.

Mr. ROE. Go ahead.

Admiral TRULY. These companies are entitled to recover as depreciation——

Mr. ROE. Nobody denies that.

Admiral TRULY [continuing]. . . . as depreciation their capital investment. We recognize that.

Mr. ROE. Nobody denies that.

Admiral TRULY. What we are doing essentially here is entering into an advance agreement that will cover the method in which they will be able to recover——

Mr. ROE. What we are doing, if the gentleman would yield, what we are doing is providing a Federal guarantee. And we are providing two things by giving them an advance contract, they can raise the money on the private side and they can build the plant. That is a matter of fact. We cannot sugarcoat that.

There is one other question I want to bring into the cycle before I make some observations. Mr. Rak, you were making that point. We said that there was the contractual agreement was for something like seven years. Did I understand that correctly?

Admiral TRULY. Yes.

Mr. ROE. And then we said that from our observation of what we were doing was that there was more than enough business to be able to achieve that. But, however, what happens at the end of seven years? Suppose, just suppose something happens and we only go six years and there is a balance to pay? Where does that balance get paid from?

Admiral TRULY. It would be paid by the U.S. Government.

Mr. ROE. By the United States Government.

Therefore, we are coming back and we are setting the following scenario: The United States desperately needs this material which we all agree to be true in the sovereignty of our country and the sovereignty of our space program. We agree with that. We come back and we say, "It is too bad that somebody made a decision or maybe it grew like Topsy over a period of time, that both of the major production—the only two major production facilities of ammonium perchlorate is in Henderson in the great State of Nevada, within two miles of each other, which was a disastrous decision to make in the first place." My God, we could have destroyed the whole country and our whole defense system because someone could have sabotaged those two plants and we would not have had any. That is a reasonable point to make.

Now, we are told and I now take on a little adversary position, we were told, "Don't get too shook up. As best as we know, the material is non-explosive." And therefore people made their decisions accordingly. Whether they couched with the point of view of the zoning and planning requirements is immaterial. Nevertheless, those were the decisions that were made. And probably honestly so. Nobody says it was not honest.

We did not nail down and may be not so, maybe we should have, how much the insurance level that those companies should have carried. I mean, if we have an enormous potential for explosions here and so much could happen, why should not those companies, as part of the governmental contract, be required to carry extraordinary insurance and even self-insurance if it was necessary so that the people would be protected if a disaster occurred? That is a reasonable point to consider now. If we are going to depend totally upon the Kerr-McGee Company—and I am not faulting Kerr-McGee—then, should we not in a governmental point of view say, "Well, the level of insurance that should be carried, in view of the point that we are trying to grow and we are going to build two new additional facilities, ought to be expanded to insure that, God forbid, there be another catastrophe that the people would have been covered and those plants would be required—which, in a part, is the responsibility of the United States Government, too, because we are the only customer. And we are providing the guarantee. And we are providing the resources to build the other facilities. A reasonable point to make, I would think. Otherwise, we do not have the coverage. And are we responsible for that, the Federal Government? The answer has got to be, "Yes, we are."

Now, let us take one more point and then I will close the circle. We talk about the idea of our concern for safety and listening to the Kerr-McGee people and they will testify, last night, they have done a lot with the help of the Fire Chief and the special team. They are doing a lot of things. And we applaud that. That is a good step forward.

The puzzling question to the members of this committee, however: Why would we be storing millions of pounds of material in any case, at either one of these plants, and why could we not set up a storage place between the Hercules Company and Thiokol in Utah and store someplace there, surplus material, because we are going to need it in those plants as we perfect our production. So, why should it be just here? Why could that not be moved out on a regular basis? It seems a reasonable question.

Now, we close one more cycle and please forgive my monologue. We close one more point. It is the unique situation, extremely unique, because it is not a natural disaster that portends a storm or flood, a cyclone, whatever is involved. That is not the issue here. We are consciously making a decision in the interest of the United States Government, of all the people of this country, to expand those facilities because we desperately need them for the defense of the nation. And we have only one plant that is available. And that plant that is available is located in Henderson, Nevada.

Now, we are coming back and saying, "Why should we not factor into that, if we can, determine the correct level of damage involved, because of this unique situation, why should we not factor into the final decision"—you will pardon the euphemism—"in the decision that is made, why should we not factor in there some residual help, even if it requires additional law for the people of this particular city?" When they did not create the problem in the first place, and we are depending upon their goodwill and their patriotism to support the solution by the Federal Government, Congress included, to be able to continue to produce in the plant here in Henderson, the Kerr-McGee. And do not blame anybody. We are trying to do the right thing. Why should it not be that the team of Department of Defense and NASA should be coming back and saying, "You know, in honest-to-God fair play, if we have got an exposure of 5, 6 or 7 million here, it ought to be part of the solution." Now, that is the question.

Is it reasonable, do reasonable people get together and make reasonable decisions? We do not have the authority to do that. Maybe we need additional legislation? Is it the right thing to do? Let's go and get the legislation because we need that.

Suppose there was an injunction and suppose people decide, "Well, too bad. We are going to go into the Federal court and say that the good faith and health of the people are being jeopardized because we, the Federal Government, refuse to participate in a solution." And we are coming back and saying, "How long are we delayed?"

When, then, I am going to give you a list of questions and if my good friends and my colleagues will indulge me and I am not going to read them all, but we have different opinions now.

One group came back and said, "Well, we could rebuild the PEPCO plant in six or seven months." We have read those reports. Now, of course, we know there is all kind of special qualifications involved and so forth. How long does it take to build the new plant as far as Kerr-McGee? How long will it take for PEPCO and what will that mean in getting ourselves recertified and so forth?

And suppose we set a series of injunctions going and so forth and we close down the Kerr-McGee plant, where is the United States Government and where is our patriotism at that particular point?

So, does not it seem logical and fair play that we should consider as part of the solution to getting ourselves back into a viable force and to get our leadership back that this issue should be part of the solution, too, and not left to FEMA and everybody else to scurry around as they can. Is that unreasonable? Part of the long explanation, but it did take that time to put it into perspective.

Do you think that NASA has some extra responsibility here because of the peculiar situation? Do you think DOD has some special responsibility? Do you need the patriotism of people or should we close the plant down and settle it in the courts, because that is really what we are faced with. What would you respond to that observation?

Admiral **Truly**. If I might, let me respond quickly. First of all, as I said before, we certainly do not think that the solution should be to close the plant, [49] go into the courts at this time. We think that by assisting both the citizens here, the people of the community, working with you, working with other agencies, there is a safe way—[50] a safe way to open and get that inventory out of that plant and to the customer.

Mr. **Roe**. How do, are we going to—if the gentleman would forgive me, how are we going to assist? What is our assistance that we are going to do? I totally agree with you, but what is the assistance we are going to give?

Admiral **Truly**. The assistance takes many forms. It takes forms of working with,[51] here in the State of Nevada with the safety issues which get very, very specific: a [52] number of feet between piles of AP, things like that, that are being worked between the company and the local officials. Assistance in strategy——

Mr. **Roe**. Between the company and the local officials are working on that. Is NASA working on that or is DOD working on that? Are they participating at all?

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[49] Admiral Truly inserted "and" at this point.

[50] Admiral Truly deleted "a safe way—."

[51] Admiral Truly deleted "with."

[52] Admiral Truly changed "a" to "the."

Admiral **Truly**. When we met with Governor Bryan about a week ago, he brought up that issue as to whether or not it might be possible to provide some safety,[53] specific safety people from NASA and DOD to specifically advise or assist. And we have—[54] we came away from that meeting and have started a discussion with the DOD to see if we——

Mr. **Roe**. Do you think it is a good idea?

Admiral **Truly**. I think it probably is a good idea if it can be done in such a way that it clearly does not in any way, either through perception or legality, take away from the authority of the people with the responsibility and the state laws and so forth. But I know in the case of NASA, we have spent thousands and thousands of hours over the last two years on safety issues. I think we have some people——

Mr. **Roe**. And, God knows, so has this committee in every move that NASA has made from the very beginning of that accident.

Admiral **Truly**. Yes.

Mr. **Roe**. The point I am trying to nail down—and we are skirting around it—and I do not mean any affrontage to you, personally, you know better than that. I am simply saying I do not see either NASA or DOD saying here today, "Yes, we are part of it and the people are part of it."

Why do we not bring in the State of Nevada as part of the three-part procedure of DOD, NASA and the State of Nevada—because that is where it is located—as an equal partner in the decision making process? We seem to be fudging around the point, but rather the right people are involved—well, who are the right people? We are the right people involved. The purpose of this hearing—is it just one little group here makes the decision, one little group there? That does not obfuscate our responsibility. That does not obfuscate your responsibility, nor mine.

Admiral **Truly**. Mr. Chairman, I would have to respond by saying that we have. I met with Dr. Fletcher, with [55] the Governor of Nevada last week. He made about six specific recommendations that he asked us to assist in. We have, since then, met with other agencies and talked and tried to be a part of a responsible assistance. We do that, however, within our particular agency responsibilities.

However, within our particular agency responsibilities, there has been a lot of discussion, for example, about the FEMA this morning. I think it is appropriate and I am sure before the day is out that you will hear their side of this particular issue.

In our case, we have worked very hard, I think, in dealing with the companies, with the DOD and with the state. And if more dealing is required to solve this issue that falls in our bailiwick, we stand ready to do that.

Mr. **Rak**. Although I know you do not like to hear it, but we do—we are limited by the authorities that we do have and we do not have the authority to impinge upon the local responsibilities, which they are handling quite well.

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[53] Admiral Truly deleted "some safety."

[54] Admiral Truly deleted "we have—."

[55] Admiral Truly changed "with" to "and."

Mr. ROE. I understand that.

Mr. RAK. And we are, I think, quite willing to discuss and have been discussing, both with NASA and with the companies involved, assistance that we can give in any safety investigations or matters of that sort.

We also are encouraging, as we are authorized to do, the Kerr-McGee Company to cooperate fully with the requests of the local community governments and the Fire Department in supporting them in the actions that they are taking and that they are responsible for taking.

Mr. ROE. Well, let me call on the gentleman from Wisconsin. Let me just say this, though, I do feel and I hope you will consider: We may need new legislation. I hope you will consider that it seems to me that one resolution that is involved with this problem is the whole final mix involved: keep Kerr-McGee open, build two new plants, settle with the City of Henderson as to what our situation is, what we can do as part of that solution. That is another way we can go and it is a legitimate approach. And I think it should be considered.

The Chair recognizes the distinguished gentleman from Wisconsin.

Mr. SENSENBRENNER. No questions.

Mr. ROE. The gentleman from Missouri.

Mr. VOLKMER. Thank you, Mr. Chairman. Dick, I have been sitting here thinking about something since our last hearing in Washington. Mr. Rak, I would like you to answer this, too. See if I am correct in my statement. If DOD was to send a payload off today, off at Vandenberg with a Titan, and instead of going out and up into orbit, it dropped and went into San Francisco, the United States Government would pay for those damages, would it not? To third parties?

Mr. RAK. I hesitate to answer that, not being expert in those matters. What the United States Government does is to——

Mr. VOLKMER. It is a United States Government mission, it is a United States Government payload and everything.

Mr. RAK. The litigation generally is between the parties that are affected——

Mr. VOLKMER. Well, it has never happened, so—it has not happened, but I believe——

Mr. RAK. It would be between the parties that are affected or damaged and the companies that were involved in the activities which may have caused the damage. And the United States Government does provide what is called indemnification under legal authority that——

Mr. VOLKMER. On third party damages.

Mr. RAK. Yes.

Mr. VOLKMER. We have the same thing in our flights. Is that not right, Dick?

Admiral TRULY. Well, my experience——

Mr. VOLKMER. In other words, if Challenger, instead of going up and exploding, that if something had malfunctioned or dropped down on Miami and there would have been third party——

Admiral TRULY. In my experience in the last two years of the Challenger accident; yes, the United States Government does have mechanisms where we, within the law, we meet our responsibility and that generally, in that particular case, where that came up in the Challenger accident, that was turned over to the Department of Justice and settled.[56]

Mr. VOLKMER. But, I mean—I just want to bring these out—that as long as you have third party injuries, basically, we have provisions to take care of those when we are in control of the situation. Now, the question is we are not in control, but the question in my mind, and I think we both think about it, is to some extent, since we are the primary user of the material, DOD and NASA, that we should look at whether or not we should have a obligation to any extent to third parties when something like this happens. That is just something to think about.

Now, what measures, Dick, have NASA, and Mr. Rak, with DOD, recommended to Kerr-McGee to increase production? What have we done so far, either through Morton Thiokol or anybody else?

Mr. RAK. By increased production, do you mean to expand the facilities or do you mean at this location?

Mr. VOLKMER. Either way. Anything.

Mr. RAK. We have not recommended any procedures to Kerr-McGee to increase production. They have indicated that they can by reprocessing some material, expand the capacity at this——

Mr. VOLKMER. At the present location.

Mr. RAK. At the present location and will undoubtedly be doing that. We have, and this has been through—and I will let Admiral Truly address this directly—through the auspices of the NASA contracting people, we have initiated some discussions with them regarding the expansion of a plant at a site outside of the Henderson area.

Mr. VOLKMER. Has that discussion have been initiated with Kerr-McGee people?

Mr. RAK. I believe that's true.

Admiral TRULY. Mr. Volkmer, yes, sir, it has. Let me very briefly answer your same question and expand on Mr. Rak's answer.

The discussions we have had with Kerr-McGee—or our strategy for recovery, if you will—is first, in the [57] safe manner, to get the plant open. And I stress in a safe manner. That does two things. One, it does start—[58] it provides a mechanism for them to start using that inventory and sending it to us [59] customers and that helps the vital need that we have and it also gets that inventory out of plant. That is now in place.

However, the details of all of that has been conducted here in Henderson between the company and the local officials. And, frankly, I think from what I have been briefed on, even though there has been a lot of debate, I think a lot of progress has been made to get that accomplished. And that is the fastest way, as I said, to get that inventory to the customer.

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[56] Admiral Truly amended his response to read: "In my experience in the last two years of the Challenger accident; yes, the United States Government does have mechanisms where we meet our responsibility within the law and that, generally, in that particular case, where that came up in the Challenger accident, was turned over to the Department of Justice and settled."

[57] Admiral Truly changed "the" to "a."

[58] Admiral Truly deleted "it does start—."

[59] Admiral Truly changed "us" to "our."

The second part of it was what Mr. Rak indicated and that is there is a proposed expansion of the Kerr-McGee Company, but not at the Henderson location. And we have started discussions with the company, but have not reached an agreement. And this is pointed at a longer term solution.

Mr. **Volkmer**. All right. That would be a new plant at a different location.

Admiral **Truly**. Yes, it would.

Mr. **Rak**. That is correct.

Mr. **Volkmer**. Now, Mr. Rak, earlier you talked about the PEPCON and the charges that would be placed back depending on the 20 million pounds, *et cetera*. But you never told us what the charges would be per pound. Would it be 2 cents, or 5 cents or 10 cents or 7 cents?

Mr. **Rak**. I do not know the answer to that. That is in the process of being negotiated with PEPCON by the Thiokol company, who will utilize the financial information which PEPCON will provide and distribute whatever amount is agreed upon over this 20 million pounds per year during that—I believe it is a seven-year period in the PEPCON case. So, I cannot answer your question directly.

Mr. **Volkmer**. Let me put it this way. Will—who will make the final—will Morton Thiokol make the final decision on that?

Mr. **Rak**. No, they will not. They will have to discuss it with the NASA contracting people and there will be an agreement that it is an equitable charge.

Mr. **Volkmer**. Now, is it possible to have a third source for AP production or a source other than PEPCON, either—a second source other than PEPCON?

Mr. **Rak**. The answer to your first question is, yes, it is possible to have a third source and we have in our recovery plan kept that option open. The current assessment of the demands or the requirements for AP in the future do not indicate that a third source would be appropriate at this time. But we would, of course, consider that.

The answer to your second question, whether a source could replace PEPCON, is that if the goal—and it is—is to recover our capacity, our capability as soon as possible—and we must do that or we will have serious shortfalls in the very near future—then there is not another source who could adequately be expected to be back in production within the time that PEPCON can.

Mr. **Volkmer**. Is that because of the question of certification, *et cetera*?

Mr. **Rak**. I am sorry?

Mr. **Volkmer**. The question of certification——

Mr. **Rak**. Certification, the fact that there are some patents involved in the process, as I understand it. There are proprietary processes involved. There would be the need for certification and PEPCON has made an outstanding effort to gather the resources that are necessary to accomplish this construction within a very short period of time, within a six-month to eight-month period of time.

Mr. **Volkmer**. Now, as I understand it, you said earlier that you are hoping for a six- to seven-month time frame on the new PEPCON facility.

Mr. **Rak**. That is correct.

Mr. **Volkmer**. From what date?

Mr. **Rak**. From this month, the beginning of July. I think that puts it into the 1st of February.

Admiral **Truly**. Mr. Chairman, if you like, I would say that PEPCON believes—they are dealing with Thiokol. They continue to believe that they can have a plant initially in operation on the 1st of February 1989. This is a very ambitious schedule in my opinion. However, it is based on a design that they had in place at the time of the accident. And, of course, they will be testifying later, as I understand it, at the hearing and you might get more definitive answers.

Mr. **Volkmer**. But I was wondering, for you to tell me then, and we are not going to have any increase, any appreciable amount by Kerr-McGee at the present facility. Some, but no great amount.

Mr. **Rak**. No appreciable——

Mr. **Volkmer**. And Kerr-McGee is not going to have a new facility built somewhere in the next six or seven months.

Mr. **Rak**. Kerr-McGee is not. That is correct.

Admiral **Truly**. That is the reason earlier I mentioned that we think that the 1988 deliveries can be met by drawing down the inventory, but the real allocation difficulties nationally are going to be for the '89, [60] the slump in supply versus demand in the year 1989, because of the time involved to get PEPCON up.

Mr. **Volkmer**. Right. And that would bring me to my final question on this area. And that is that earlier in the testimony in D.C., we talked about the Shuttle payload that was set out for the 1988-'89 and which one of those could be put off on an ELV instead of going on a Shuttle and DOD or our own missions or whatever. And you all were looking at that, as I remember your testimony, and I was wondering when and if there would be any decision made on the possibility of moving some of those from the Shuttle to ELVs?

Admiral **Truly**. Well, if we can resolve the allocation process and if the Shuttle returns to flight on schedule and we can do that, we have not given up on being able to launch those specific payloads. That is, the ones you are mentioning [61] are the ones between the first flight and the Galileo mission towards the end of 1989.

Mr. **Volkmer**. Correct.

Admiral **Truly**. We believe that if we can work out with DOD principally, but with the other users, an allocation process, we believe the 1988 deliveries of ammonium perchlorate may support those missions and we will not have that problem. I think the ELV offload issue, frankly, will really be a year downstream from that and, luckily, we have a little bit more time to evaluate it with you.

Mr. **Volkmer**. Mr. Chairman, I used all my time. I have some other questions, but maybe I can give them in writing.

Mr. **Roe**. Yes, we do have a long list.

Mr. Jim Bilbray?

Mr. **Bilbray**. I want to get back to some of the Chairman's questions. One, from what I ascertained what you said earlier is the fact that you agreed—you have met with the Governor—DOD and

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[60] Admiral Truly changed "the '89" to "1989."

[61] Admiral Truly amended this to read: "The ones you are mentioning. . . ."

NASA are willing to get together and work out a plan to certify and to recommend changes for the existing facility here in Henderson. You are willing to get together and send in, hopefully, teams of experts to work with the state to work out this problem in Clark County?

Admiral TRULY. We have started initial meetings with the DOD. And we have got some people—as a matter of fact, they are going to be here over the weekend and we can discuss that with the company this weekend.

Mr. BILBRAY. But you are committed to work with the state authorities. What we want to see is, right now in the state, is the fact that in everybody's opinion that the Kerr-McGee facility is as safe as possible to be. And I think that "as safe" is a big proposition.

The other question is, the Chairman brought up the tonnage removal. We see a lot of material stored on site at Kerr-McGee presently. They are doing a lot. They are building new pads so that—I think they said no more than 250 tons in any one area at any one time. But the concerns that I have and I think the Chairman has, is there any way—we have a large military facility right here: Nellis Air Force Base. We have the Nevada Test Site. We have lots of facilities around here that are owned by the government. Is there any way of NASA and the DOD getting together with Kerr-McGee and so that only a very small amount of this material is kept on site at any one time? And we could start this process right away. As I said earlier, people want to see light at the end of the tunnel. If they do not have this massive storage of material, the end result of a problem is very, very small.

And what we would like to see is maybe DOD and NASA and Kerr-McGee and the county and state come together and the City of Henderson and come together with a plan to move this stuff.

Now, here is another problem we have and people have asked this. The chemical plants along this area use that railroad right-of-way that runs out back over to the UP[62] tracks and then on. I understand that a request has been made by different individuals in the community for DOT to look at those tracks to make sure that those tracks are safe. Because there has been a lot of, we feel, structural damage that might have been done to those tracks in the resulting explosion, plus the fact that it is not a highly used corridor except for this type of material. It is not a passenger train site of usage or actually a lot of freight trains other than what has been used by the chemical plants. And it is very important to us to know that those tracks are safe for—as it moves through some residential areas. And that is the last thing we want, is something to happen with some of those chemicals being moved through there.

The third is the fact—would the DOD and NASA support this committee if this committee brought forth a bill for the transfer of several thousand acres of land somewhere within, say, a 50-mile radius of the Las Vegas Valley for the relocation of these plants at—you know, a grant of this land to the State of Nevada for this type of industries that are defense-related, that will be deemed a potential for public safety either because of chemical contamination or for explosive capacity, should be moved.

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[62] Union Pacific railroad.

And the last question is, what the Chairman brought up was the fact that would you support—and let us take FEMA out of it, because I do not think we are going to get anywhere with FEMA. Let us look at the compensation package that would be granted——

Mr. ROE. I would hope the gentleman will retract that point of view because we are not done with FEMA yet.

Mr. BILBRAY. I know we are not done, but I do not have much hope for it. But what I am saying is a compensation package from the Federal Government that would go to the citizens of the Las Vegas Valley that were damaged so that people can come in—if their claim is as small as $80 or if it is $20,000 or if it is a half million, that they could draw against to make them whole, and whether that sum is $5, $3, or $20 million, would DOD and NASA support such a proposition to bring this community whole? That is more than one question. Do you remember them all?

Mr. RAK. Not really, but let me start and then Admiral Truly can come in. Let us start with what I think was the first question about the reduction of the material on site at Kerr-McGee. There are a couple of aspects to that. And the manufacturers, themselves, who you will hear from this afternoon, will be able better to address that. But I understand that it is necessary to have a certain amount of inventory on site in order that they can blend this material to meet the specifications that are required by different rocket motors. I do not know what the quantities are.

Mr. BILBRAY. I think they said there is, like, four or five different blends that they use. It is not like there are 100 different blends. So, therefore, they could make a capacity—but what I'm asking is if we can and they say, "We only need this much tonnage," and yet because of logistic problems, they have on hand four times that capacity, would the Department or Air Force—which you are an Assistant Secretary of—commit that facilities be made at Nellis to store this material during the interim before it is shipped out to your sources?

Admiral TRULY. I can commit that we can consider that. I cannot commit today. But I would like to point out that that might not be the best solution in that given the fact that there is the requirement for blending and that would require considerable transportation back and forth between Nellis and the plant site and that would have to be over the streets, obviously, or the railroad right-of-way. So that it might be creating a larger issue than to adequately provide for the storage on site at the plant. And as you all know and recognize, and as I understand, Kerr-McGee is taking measures to comply with the requirements of the Fire Department to separate,[63] to reduce the quantities being stored in any given pile and to separate——

Mr. BILBRAY. Then what you are saying basically is that the end users are going to have to know their requirements early. And as the articles are manufactured, the blending is going to have to be done early and the material is going to be shipped out so that there is no end capacity—I mean there is not a larger amount of material sitting at Kerr-McGee at any one time. Because that is what I understand from the companies is, basically, what the end users have been doing is virtually calling 48 hours in advance and saying, "I need this much material," instead of four to five or six months. We should know six months in advance, should we not, what we need? Why can we not tell Kerr-McGee six months in advance we need this much tonnage and then as we manufacture it, we ship it out? So that if there ever is an explosion at Kerr-McGee, and God forbid there ever is, but we said that about the MGM fire, too.[64] There would never be another one. And within a matter of months, there was the Hilton fire.[65] Lightning does strike twice. We have found that out. And that is what we are afraid of here. And that is what the people are afraid of. If we can get the material out, and they know that there will be one-fourth of the material on hand at any one given day than there was at PEPCON, then maybe the fears would be a little relaxed because they would know that the potential for explosion would be so much less. If it did explode, it would not be of the capacity that we faced at PEPCON.

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[63] Admiral Truly inserted the word "and" at this point.

Mr. RAK. Well, that certainly is a consideration that we will discuss both with Kerr-McGee and rocket motor manufacturers. But, again, you must realize [66] we at the Department nor NASA buy this material directly. It is all purchased for end users.

Mr. BILBRAY. Before we run out of time, would you address the compensation part of it, because I think that is important.

Mr. RAK. For the Department of Defense, we will, of course, do whatever the Congress in its wisdom decides we should do.

Mr. BILBRAY. We would like you to support us, though.

Mr. RAK. Well, we will support whatever you decide to do.

Mr. BILBRAY. How about NASA?

Admiral TRULY. I think it is fair to let this process run its course. I must say that I think there has been premature judgments at least in this hearing about FEMA. And they have not been heard yet. And I am sure you will and I think that could be decided later.[67]

But in general, I can commit for my part at NASA at least. You brought up a couple of specific issues that, frankly, I had not heard before. And even though I am not sure that it takes a NASA, for example, to get a Federal inspection of railways or that is appropriate, but I can assure you that I would not be sitting here if I was not in general support of trying to help unsnarl this problem. Thank you, sir.

Mr. ROE. Well, we thank the gentleman. We thank our witnesses profusely for your coming this long distance to be with us. And we have some written questions that we will be submitting to you for further review. So, we want to thank you very much for being with us and we appreciate your input. We know you are working hard at it. The purpose of a public forum is to lay out the problems as they are, so we can deal with them. We thank you very much for being here.

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[64] The MGM Grand Hotel in Las Vegas, Nevada, caught fire in November 1980; 96 people were killed.

[65] The Las Vegas Hilton suffered a fire in February 1981. The fire marshal of Nevada reported "several deaths and injuries" in testimony before the Committee on Science, Space, and Technology.

[66] Mr. Rak inserted the word "neither" at this point.

[67] Admiral Truly amended his response to read: "They have not been heard from yet, and I am sure you will and I think that could be decided later."

We are going to switch the schedule a little bit because of timing here. And we are going to, for the benefit of some of the members here, we are going to call up our Panel four, first, which is the FEMA representative, Mr. Grant Peterson, who is the Associate Director, State and Local Programs, Federal Emergency Management Agency, FEMA; and Mr. Dennis Kwiatkowski, Assistant Associate Director, Disaster Programs, Federal Emergency Management Agency.

So, we thank you for being with us today and who is your third party? Mr. Broussard? [68] All right, the Chair recognizes Mr. Peterson.

[Pause.]

Mr. Roe. The request has been made by one of our members to have the witnesses sworn in.

[Whereupon, the witnesses were sworn *en banc*.]

Mr. Roe. The Chair recognizes Mr. Peterson. Thank you.

STATEMENT OF GRANT C. PETERSON, ASSOCIATE DIRECTOR, STATE AND LOCAL PROGRAMS, FEDERAL EMERGENCY MANAGEMENT AGENCY

Mr. Peterson. Thank you very much, Mr. Chairman, and distinguished Members of the House of Representatives. I am Grant Peterson, Associate Director of the State and Local Programs, and support director to FEMA. With me today is Mr. Dennis Kwiatkowski, of the Office of Disaster Assistance Programs, Mr. Mike Hirsh of the Office of General Counsel, and Mr. Bob Broussard, who directed the second team which assessed damage in Nevada.

I have a prepared statement which I would like to read and submit for the record and I will be very pleased to answer questions, sir.

Mr. Roe. Is Mr. Peterson—are you going to review your whole statement? I think you should.

Mr. Peterson. Thank you very much, sir.

At the outset, Mr. Chairman, I want to emphasize that we at FEMA are very sensitive to the impact of the May 4th explosion in Henderson. And we are appreciative and respectful of the interest shown by the State Governor and other elected representatives who are working in support of the citizens of this state.

I am here today representing the Federal Emergency Management Agency, FEMA. I will discuss the Disaster Assistance Program, the disaster declaration process as it relates to the explosion in Henderson, Nevada which occurred on May 4, 1988. I would like to speak to two issues.

The first is the production of ammonium perchlorate, which is crucial to our national interests. Certainly, we are aware of the facility's importance and the need to rebuild it quickly and safely. However, at this time, we see that there is no FEMA program for rebuilding that plant. Other agencies have spoken to that issue today and so I will move to the second issue which relates to the Governor's request for a major disaster declaration, the disaster declaration process also and the criteria applied in evaluating this situation.

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[68] Mr. Robert Broussard, Chief of Disaster Assistance Programs, Region XI, Federal Emergency Management Agency.

The Disaster Relief Act of 1974, Public Law 93–288, is the statutory authority under which FEMA administers the disaster assistance program. This statute outlines the purpose of the Federal disaster assistance, the circumstances under which it can be made available, and the specific programs of disaster assistance that are authorized to meet the needs of affected people and communities.

To summarize, the purpose of this law is to provide supplemental assistance—supplemental assistance. The state and local governments have the primary responsibility to respond to disasters. Federal disaster assistance supplements the efforts of state and local governments and disaster relief organizations when the severity and magnitude of the incident is beyond the capability of a state and local governments to effectively respond and when significant state and local resources have been committed to respond to the incident.

When a Governor requests that the President declare that a major disaster or emergency exists, it is FEMA's responsibility to assess that situation, to determine whether these statutory requirements have been met and to make a recommendation to the President as to whether or not supplemental Federal disaster assistance is warranted and is appropriate. FEMA evaluates a number of factors in deciding whether Federal disaster assistance is warranted. I would like to discuss these factors and our findings in the Nevada situation:

The first factor is the impact on state and local government facilities and services. In this case, total damage to publicly-owned facilities and buildings, public schools and the St. Rose de Lima Hospital as reported in the Governor's request was approximately $1,118,630. Our estimate of the uninsured public sector damage and protective measures was approximately $403,000. That is the uninsured public sector damage.

The next factor is the impact on private property. In the areas we were requested to survey, we found that approximately 8,900 homes and 278 businesses were affected. Most of the damage consisted of broken glass, missing shingles and unhinged and broken doors.

The next factor is the efforts of state and local government and disaster relief organizations to respond to that situation. The Disaster Relief Act requires that state and local government disaster expenditures, of which state commitments must be a significant proportion, constitute a reasonable amount of the expenditures for the disaster. According to the Governor's initial request, the state expended $19,000 for costs incurred by the Highway Patrol and the National Guard.

Mr. **Roe**. In the initial request?

Mr. **Peterson**. Yes, sir. That is correct.

During the first damage assessment, an additional $34,300 expenditure by local governments was identified. While there may be additional costs that have been incurred, they have not been presented to FEMA.

Therefore, to our knowledge, the total combined response of the state and the affected local governments is only $53,300. Twenty families initially requested assistance from the American Red Cross. These twenty were assisted. To date, to our knowledge, there have been no other requests for Red Cross assistance.

The next factor is the availability of insurance to assist in the recovery. The Nevada Division of Insurance reports that over 11,000 claims have been filed. The average claim for the home and personal property damage, by their report, is $3,720 and the average deductible is $233. This makes it clear to us that the majority of the damage in this instance was covered by insurance.

The next factor is the impact on state and local financial resources. The state operating budget is reported to be approximately $585 million. The uninsured damage to public buildings and facilities and eligible emergency protective measures is approximately $403,000, or seven-hundredths of one percent of the state's budget.

The next factor is assistance available from other Federal agency programs. The SBA Administrator has the authority to provide loans for personal property, homes and businesses without—repeat, without a Presidential declaration. SBA participated in the joint damage survey and the Governor's request has been forwarded to the SBA for their review.

We have an understanding—we do not wish to speak for them, but we have an understanding that it is unlikely that the SBA declaration criteria, which is 25 homes or businesses that have 40 percent or more uninsured damage, will be met.

The next factor is the ability of the disaster assistance programs to address the unmet needs. The Disaster Relief Act specifically prohibits duplication of benefits received through insurance or through other programs. In addition, insurance deductibles are not eligible disaster assistance payments for individuals under this Disaster Relief Act.

The next factor is the severity and magnitude of any unmet, disaster caused needs. As mentioned previously, we have found only $403,000 in uninsured public sector damage. According to the Nevada State Insurance Commission, the private sector uninsured damage was primarily limited to deductibles averaging around $233 per claim.

Mr. Chairman, we believe that clearly under this law we cannot consider this to be a situation of such severity and magnitude as to require supplemental Federal disaster assistance.

In summary, it is clear that there are no simple mathematical calculations which, taken by themselves, will indicate whether or not a criteria stipulated in law has been met. Our objective is to provide the very best professional evaluation as quickly as we can so that the President can make his decision.

Since 1980 alone, FEMA has evaluated 306 Governors' requests which resulted in 201 Presidential declarations. We at FEMA are proud of the record we have established in performing our role in a timely and in a consistent manner.

I would like now to move on, if I may, to the day of the explosion and some chronology. On the day of the explosion, officials of the

State of Nevada requested that personnel from FEMA Region IX in San Francisco conduct a joint damage assessment. FEMA Regional personnel experienced in damage assessment arrived on the site the very next day, May 5, 1988, and began assessing that damage.

State and local government representatives escorted the assessment teams to the damage sites. In addition, the SBA and the Red Cross participated in the assessments. The teams asked to be shown all known damaged facilities. They visited owner-occupied homes, rental properties, mobile homes, elementary and secondary schools, businesses, the hospital, as well as a fire station and other public buildings. On May 12, 1988, FEMA forwarded its recommendations to the White House.

On May 24, 1988, FEMA agreed to conduct a second damage assessment. A team of FEMA personnel—again composed of experienced damage assessment experts, this time from Region VI in Denton, Texas—was asked to take a fresh look at the situation. We wanted to be very sure that all eligible requirements were identified and that we had a firm reading on insurance coverage and insurance claims.

Again, state and local representatives escorted the Federal representatives to the damage sites. In addition, approximately 100 affected individuals, selected at random, were questioned as to whether or not they were covered by insurance. Ninety-nine of those questioned responded that they were covered by insurance. Two of the major insurance companies in the area were contacted and they provided us with information as to the number and size of claims that they had received. Four building contractors that work in the area were questioned concerning the nature of the damage they had observed. We feel that every reasonable effort was made to identify all of the potential eligible requirements for assistance.

This resurvey was completed on May 27, 1988. The result of the resurvey was conveyed to the White House on June 1, 1988. Based on the information gathered, our observations, and the criteria established by Congress, the President decided that the situation was not beyond the capability of the state and local government. On June 8, 1988, the Governor was notified that the findings of the surveys did not justify a requirement for supplemental Federal assistance under the law.

The disaster assistance regulations provide for an appeal process in the event that a disaster request is denied. The appeal must provide additional or new information in order to be considered. FEMA has received an appeal that was dated June 15, 1988, from the Governor of Nevada, in which he states that despite the two assessments already completed, previously undetected damage has been reported. In this type of an appeal, it is FEMA's policy to conduct a resurvey with a team headed by FEMA headquarters personnel. We notified state officials that we were prepared to conduct such a resurvey beginning last Friday, June 17, but at the request of the state we agreed to postpone the resurvey until yesterday, June 23.

In this appeal, FEMA is ready. We are willing to examine any new or additional damage which the state and local officials will identify for us. Since the appeal emphasized previous unidentified structural damage, we have made the commitment to provide professional technical expertise necessary to examine structural damage to roofs, walls and foundations and they are here today. As in the previous two surveys, we are prepared to provide a thorough and complete assessment of damages identified by the state and local government.

I began my statement, sir, by saying there were two issues. While related, I think they must be kept separate and somewhat distinct. First, we are now addressing the Governor's appeal here in Henderson for disaster assistance. Our headquarters and regional personnel are here and we are fully prepared to document any additional damage which can be found. We will then evaluate the situation, determine what needs exist which can be met using the authorities and programs of assistance which have been established by Congress in the law.

Second, as I said earlier, we are aware of the importance of ammonium perchlorate production to the interests of the United States of America. However, under the law provided by Congress for disaster relief, there are no FEMA disaster programs available for the rebuilding of this manufacturing plant.

I assure you that we at FEMA are sensitive to the traumatic effect of this explosion on the residents of Nevada. We feel great compassion for those who have suffered personal injury here and the loss of family members and the damage to their property. We feel extreme compassion.

I would just like to say in moving off of my prepared text for a moment, you know,[69] we are not here to find a way to turn down a declaration. That is not our business. That is not our business. Nobody gives us any points for turning down a declaration, neither the President nor the Senate nor anyone else. And that is not what we are about.

We are here, in all sincerity, to request the local governments and respond to the Governor's appeal to show us additional damage. We have professionals here that are engineers in structure and we are here to look at every single aspect that can be provided. But we are limited under the wisdom and the law of Congress and the law that they have provided us with. I stand ready for your questions, gentlemen.

[The prepared statement of Mr. Peterson follows:]

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[69] Mr. Peterson asked that "you know" be changed to "that."

STATEMENT OF
GRANT C. PETERSON
ASSOCIATE DIRECTOR, STATE AND LOCAL PROGRAMS AND SUPPORT
FOR
THE FEDERAL EMERGENCY MANAGEMENT AGENCY

BEFORE THE

COMMITTEE OF SCIENCE, SPACE, AND TECHNOLOGY

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

U. S. HOUSE OF REPRESENTATIVES

JUNE 24, 1988

I am here today representing the Federal Emergency Management Agency (FEMA). I will discuss the Disaster Assistance Program, the disaster declaration process, and the explosion in Henderson, Nevada which occurred on May 4, 1988. We have been asked to address two issues. The first is the production of ammonium perchlorate, which is crucial to our national interests. Certainly, we are aware of the facility's importance and the need to rebuild it quickly and safely. However, the disaster program, which FEMA administers, is not available for the purpose of rebuilding the plant. It is my understanding that the other federal agencies represented here today will address the plant itself.

The second issue relates to the Governor's request for a major disaster declaration, the disaster declaration process, and the criteria applied in evaluating this situation. The Disaster Relief Act of 1974, Public Law 93-288, is the statutory authority under which FEMA administers the disaster assistance program.

This statute outlined the purpose of Federal disaster assistance, the circumstances under which it can be made available, and the specific programs of disaster assistance that are authorized to meet the needs of affected people and communities. To summarize, the purpose of this law is to provide supplemental assistance. The State and local governments have the primary responsibility to respond to disasters. Federal disaster assistance supplements the efforts of State and local governments and disaster relief organizations when the severity and magnitude of the incident is beyond the capability of State and local governments to effectively respond and when significant State and local resources have been committed to respond to the incident.

When a Governor requests that the President declare that a major disaster or emergency exists, it is FEMA's responsibility to assess the situation, to determine whether these statutory requirements have been met, and to make a recommendation to the President as to whether or not supplemental Federal disaster assistance is warranted and appropriate. Within FEMA, this responsibility is performed largely by the ten FEMA regional offices. They work closely with State officials in monitoring developing disaster situations and, as we did in this case, conducting joint Federal, State and local assessments in disaster events which State officials believe may be beyond their response capability.

FEMA evaluates a number of factors in deciding whether federal disaster assistance is warranted. I would like to discuss these factors and our findings in the Nevada situation:

A. The first factor is the impact on State and local government facilities and services. In this case, total damage to publicly owned facilities and buildings, public schools and the St. Rosa DeLima Hospital as reported in the Governor's request was approximately $1,118,630. Our estimate of uninsured public sector damage and protective measures is approximately $403,000.

B. The next factor is the impact on private property. In the areas we were requested to survey, we found that approximately 8900 homes and 278 businesses were affected. Most of the damage consisted of broken glass, missing shingles and unhinged doors.

C. The next factor is the efforts of State and local government and disaster relief organizations to respond to the situation. The Disaster Relief Act requires that State and local government disaster expenditures, of which State commitments must be a significant proportion, constitute a reasonable amount of the expenditures for the disaster. According to the Governor's initial request the State expended $19,000 for costs incurred by the

Highway Patrol and National Guard. During the first damage assessment, an additional $34,300 expenditure by local governments was identified. While there may be additional costs that have been incurred, they have not been presented to FEMA. Therefore, to our knowledge, the total combined response of the State and affected local governments was only $53,300. Twenty families initially requested assistance from the American Red Cross. These twenty were assisted. To date, there have been no other requests for Red Cross assistance.

D. The next factor is the availability of insurance to assist in recovery. The Nevada Division of Insurance reports that over 11,000 claims have been filed. The average claim for home and personal property damage is $3720 and the average deductible is $233. The small average deductible makes it clear that the majority of damage was covered by insurance.

E. The next factor is the impact on State and local financial resources. The State operating Budget is reported to be approximately $585 million. The uninsured damage to public buildings and facilities and eligible emergency protective measures is approximately $403,000 or seven hundredths of one percent of this budget.

F. The next factor is assistance available from other Federal agency programs. The only other Federal disaster program, of which we are aware, that is potentially applicable to this situation is the disaster loan program of the Small Business Administration (SBA). The SBA Administrator has the authority to provide loans for personal property, homes and businesses without a Presidential declaration of disaster when the circumstances meet their criteria. SBA participated in the joint damage surveys and the Governor's request has been forwarded to SBA for review. We understand that it is unlikely that the SBA declaration criteria of 25 homes and/or businesses with 40% or more uninsured damage will be met.

G. The next factor is the ability of the disaster assistance programs to address the unmet needs. The Disaster Relief Act specifically prohibits duplication of benefits received through insurance or through other programs. In addition, insurance deductibles are not eligible disaster assistance payments for individuals under the Disaster Relief Act.

H. The next factor is the severity and magnitude of any unmet disaster caused needs. As mentioned previously, we have found only $403,000 in uninsured public sector damage. Private sector uninsured damage was primarily limited to deductibles averaging around $233 per claim. Clearly, under the law, we can not consider this to be a situation of such severity and magnitude as to require supplemental Federal disaster assistance.

In summary, it is clear that there are no simple mathematical calculations which, taken by themselves, will indicate whether or not the criteria stipulated in the law, have been met. Our objective is to provide the best professional evaluation as quickly as we can so that the President can make his decision. Since 1980 alone, FEMA has evaluated 306 Governor's requests which resulted in 201 Presidential declarations. We at FEMA are proud of the record we have established in performing our role in a timely and consistent manner.

On the day of the explosion, officials of the State of Nevada requested that personnel from FEMA Region IX in San Francisco conduct a joint damage assessment. FEMA Regional personnel, experienced in damage assessment arrived on site the next day, May 5, 1988 and began assessing the damage. State and local government representatives escorted the assessment teams to the damage sites. In addition, the SBA and Red Cross participated in the assessment. The teams asked to be shown all known damaged facilities. They visited owner-occupied homes, rental properties, mobile homes, elementary and secondary schools, businesses, the hospital, as well as a fire station and other public buildings. On May 12, 1988, FEMA forwarded its recommendation to the White House.

On May 24, 1988, FEMA agreed to conduct a second damage assessment. A team of FEMA personnel, again composed of experienced damage assessment experts, this time from FEMA Region VI in Denton, Texas, was asked to take a fresh look at the situation. We wanted to be sure that all eligible requirements were identified and that we had a firm reading on insurance coverage and insurance claims. Again, State and local representatives escorted Federal representatives to damage sites. In addition, approximately 100 affected individuals selected at random, were questioned as to whether or not they were covered by insurance. Ninety-nine of those questioned, responded that they were. Two of the major insurance companies in the area were contacted and provided information as to the number and size of claims they had received. Four building contractors at work in the area were questioned concerning the nature of the damage they had observed. Every reasonable effort was made to identify all potentially eligible requirements for assistance.

The resurvey was completed on May 27, 1988. The results of the resurvey were conveyed to the White House on June 1, 1988. Based on the information gathered, our observations, and the criteria established by Congress, the President decided that the situation was not beyond the capability of the State and local government. On June 8, 1988, the Governor was notified that the findings of the surveys did not justify a requirement for supplemental Federal assistance.

The disaster assistance regulations provide for an appeal process in the event that a disaster request is denied. The appeal must provide additional or new information in order to be considered. FEMA has received an appeal dated June 15, 1988 from the Governor of Nevada in which he states that despite the two assessments already completed, previously undetected damage has been reported. In this type of appeal, it is FEMA policy to conduct a resurvey with a team headed by FEMA headquarters personnel. We notified State officials that we were prepared to conduct such a resurvey beginning last Friday, June 17, 1988. At the request of the State we agreed to postpone the resurvey until yesterday June 23, 1988. In this appeal, FEMA is ready and willing to examine any new or additional damage which State and local officials identify. Since the appeal emphasized previously unidentified structural damage, we have made the commitment to provide technical expertise necessary to examine structural damage to roofs, walls and foundations. As in the previous two surveys, we are prepared to provide a thorough and complete assessment of damages identified by the State and local governments.

I began my statement by saying there were two issues. While related, they must be kept separate and distinct. First, we are now addressing the Governor's appeal for disaster assistance. Our Headquarters and Regional Personnel are here and we are fully prepared to document additional damage which can be found. We will then evaluate the situation to determine what needs exist which can be met using the authorities and programs of assistance which have been established by Congress in the law. Second, as I said earlier, we are aware of the importance of ammonium perchlorate production to the interests of the United States Government. However, under the law provided by Congress for disaster relief there are no FEMA disaster programs available for the re-building of this manufacturing facility.

I assure you that we at FEMA are sensitive to the traumatic effect of this explosion on the residents of Nevada. We feel great compassion for those who have suffered personal injury, the loss of a family member or damage to their property. I would be happy to answer any questions which you may have at this time.

Mr. Roe. Does Mr. Kwiatkowski have anything he wants to add to the testimony?

Mr. Kwiatkowski. No, Mr. Chairman.

Mr. Roe. All right. We want to thank you very much. And I think you have given a very clear and concise statement. Let me ask you this so that I understand—or maybe I just did not quite hear you correctly, but I think I did. You are saying that, as far as the data that you have before you, in concert with the state and the community—at least as far as inspections are concerned and the people you spoke to—this is the basis that you are making decisions on, simply because that is the data you got. Is that correct?

Mr. Peterson. That is absolutely correct, sir.

Mr. Roe. Now, on the basis of the appeal that we are speaking to, the Governor has now asked for an appeal. And now you have available, as I understand it, a team of professionals and additional expertise, if you like, that are available here to work with the Mayor and the people of the City of Henderson, to take another review before you make your determination and also with the state officials.

Tell me something, how is that coming together? I mean where is that being operated? Out of the town hall or this building? Is there a particular place where people go? Has it all been announced? How does that work?

Mr. Peterson. When we come into the community, sir, we first notify the state that we are coming back and we have the Governor's appeal. He has given us an adequate reason in his text for returning. And we have a meeting together, as was held yesterday at 10:00 a.m., requesting state and local officials meet with us and that they then set up a program to visit any additional disaster sites. And this time, we brought a technical team of qualified engineers from the private sector, Tudor Engineering, to come along and look at any structural damages. They worked all day yesterday and they are working today, sir.

Mr. Roe. Well, again, forgive my ignorance. Are they working on the basis—how will you notify—does a citizen knock on your door? Has there been a newspaper ad put out: "We are here. We have got the best team in the world. Who do we call upon?" I am not being facetious. Does the citizen know? That is where I am coming from.

Mr. Peterson. We do not do public announcements——

Mr. Roe. Who is supposed to do that?

Mr. Peterson [continuing]. In the paper. We notify the state and we let the state and the local governments, for the most part, deal with that issue. And Mr. Kwiatkowski has more information on that. If you have anything you want to add, please do so.

Mr. Kwiatkowski. Mr. Chairman, I understand that there was a hot line set up previous to our [70] appeal, which we are doing here now, that citizens could have called in to report damages. So, when we come into a disaster area to do a survey, we rely on state and local officials to advise us where the damage is and take us to the places.

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[70] Mr. Kwiatkowski changed "our" to "the."

So, we assume that, based on the phone calls that would have come in and based on the state and local officials' knowledge of the disaster area, that that is where we would go.

Mr. Roe. Well, let me ask you this: Have you been notified, have people been calling in on the hot lines and so forth?

Mr. Kwiatkowski. I assume that we were getting the information. According to the team, they were taken to many residences yesterday. And I assume they got that information from the hot line.

Mr. Roe. Who took you to the residences yesterday?

Mr. Kwiatkowski. Local officials.

Mr. Roe. Let me ask this. Would it not make logical sense—how long are you going to be here? A couple more days or today or tomorrow, just out of curiosity.

Mr. Kwiatkowski. As long as it takes to look at the damage.

Mr. Roe. Well, would it not be a logical thing to call a town meeting and say, "Hey, guys, we are here. Come bring your needs, bring your files." That is what we do in Wayne, New Jersey, when we have a flood thing. I mean, we have always gotten right out there with the Governor and the Mayor and we publicized it and then people come in. Has that not been done? Is that what you are telling me?

Mr. Kwiatkowski. Sir, as long as I have been in the program, I do not know of any public notice of a damage assessment. Again, we deal with the local officials who are supposed to know.

Mr. Roe. I am not being cross. I am just trying to say how do we get—apparently—here is what is puzzling me and then I will defer to Mr. Sensenbrenner because he has to get an earlier plane.

What is puzzling me is the following and I do not think I am that stupid. What is puzzling me goes as follows: One group says, "Well, the total," and you have given your summary here, total amount of damage, by the best we understand, is $3 million. And somebody says, "Well, it should be $16 million." And somebody else says, "It should be $23 million." Now, even we cannot deal with that. So, somebody has to come down and clarify what the quantitative amount of damage we can identify is. Is that fair? I mean, that is what we are talking about.

So, what we would do in my state if we—once we were at the point of getting declared an emergency or applying for an appeal, which we always work through—we would notify the community. We would set up a public meeting. And we would say, "Here is what the situation is. Here is what we are doing. This is what you guys have got to do." And we set up a team of SBA people, a team of this and a team—at the high schools and so forth and people went to that place and they presented their data. Has that been done here?

Mr. Peterson. That has not been done here to my knowledge in the terms that you have specifically related them, sir. However, we do make [71] it is standard policy and we do notify the state and local governments that this is their area. They are familiar with it. And we will spend whatever time necessary going to every point that they ask us to go to. And, additionally, yesterday, they had substantial lists of those homes and homeowners that they had worked on to identify for us to see, sir.

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[71] Mr. Peterson deleted "we do make."

Mr. ROE. Okay. So, we are making some progress.

Mr. PETERSON. Yes, sir.

Mr. ROE. Do you feel that the progress—that is okay. We will ask the local officials. The Chair defers to the gentleman from Wisconsin.

Mr. SENSENBRENNER. Thank you, Mr. Chairman. And first of all, let me thank you two gentlemen for appearing here today. I think this is the first time that FEMA officials have appeared at a public meeting in Henderson since the disaster. That is probably not your fault, but I am glad that this subcommittee could facilitate this happening because I think the people in this community need some answers. They might not get any money in the end, but they are entitled to answers to their questions and I hope that today's hearing will provide most, if not all, of the answers to those questions.

First, I would like to make it very clear. Is it your position that it is not FEMA's responsibility, but it is the responsibility of state and local government to notify people who have been damaged in a potential disaster area to get their information in so it can be evaluated?

Mr. PETERSON. Yes, sir. That would be a correct assessment.

Mr. SENSENBRENNER. So, if there was inadequate notice of the people of Henderson on where they should send their information, particularly relating to structural damage that has been uncovered in the last couple of weeks, that responsibility and that fault lies with the state and local government officials rather than with FEMA.

Mr. PETERSON. We feel it is appropriate that the state and local governments deal directly with their constituents. Yes, sir.

Mr. SENSENBRENNER. Okay. Well, I probably will be on my way to the airport at the time the state and local government officials testify before the subcommittee. So, I would just like to ask them at that time to let everybody know here including the people from the news media, where the people can give this information. And I would request you and your team to stick around at least another extra day or two so that if there is any new information, you can evaluate it before making your recommendation on the appeal.

Mr. PETERSON. We will certainly honor that, sir. And I would just add, if I might, we will certainly honor that request, sir, and it is done. I just would add that I was an elected county commissioner for five years before taking this position. And I know that I wanted to deal with my citizens in the area. And I think our procedure is historically correct.

Mr. SENSENBRENNER. Secondly, when Governor Bryan testified earlier this morning, he had two specific complaints that he asked me to direct questions to you. And I am complying with his request. First is relative to the confusion over whether insurance deductibles figure in your consideration.

As you have testified, and as both Mr. Volkmer and I have stated, it has been our impression all along that insurance deductibles do not count in this formula. But where in the material that governors' offices around the country have does it very clearly and explicitly state that insurance deductibles do not count and on what statutory authority is that based?

Mr. PETERSON. Okay. First, I would like to respond to this issue and let Mr. Kwiatkowski also respond to it. But this is a precedent since 1974. I have only been here since January, but I asked internally the question: "What has been the policy of the Federal Emergency Management Agency on this issue?" And it has consistently been since 1974 the deductibilities do not qualify under this Act. Also, we have training schools that FEMA puts on yearly to inform local and state officials of the criteria and to train them on that criteria. And, so, we go to extent to make that clear. And I believe that all of our teams are aware of that and transmit that information to the state and local governments at the time.

Mr. Kwiatkowski, would you like to add to that?

Mr. KWIATKOWSKI. Sir, in the individual assistance side of the program, there is two sides of the program.[72] One deals with people and the other one deals with public facilities. In the individual side of the program, it has been policy since 1974 that deductibles would not be eligible. Basically, the programs that are available to individuals under the Act deal with unmet needs. The Small Business Administration loan program which can be triggered without a declaration or is triggered with a declaration would address deductibles by offering low interest loans.

With regard to the public sector, insurance deductibles would be part of the reimbursement if they were eligible.

Mr. SENSENBRENNER. So, this information has been available to state and local government officials, either in writing or through the training sessions that you have described.

Mr. KWIATKOWSKI. That is correct, sir.

Mr. SENSENBRENNER. And FEMA has been very clear whenever it has been asked: the deductibles do not qualify in terms of personal loss.

Mr. KWIATKOWSKI. Yes, sir.

Mr. SENSENBRENNER. But they do qualify in terms of public sector losses and, in certain instances, in terms of business losses.

Mr. KWIATKOWSKI. That is correct, sir.

Mr. SENSENBRENNER. Secondly, Governor Bryan complained during his testimony that teams have appeared on site without him or other state and local government officials knowing about it. How do you respond to that complaint?

Mr. PETERSON. I would like for maybe both of the other witnesses to deal with that issue, sir.

Mr. KWIATKOWSKI. First of all, sir, in the first survey, I think, as the Governor noted in his testimony, our teams were asked by the state to come in and they were here the day after the incident. In the second resurvey——

Mr. SENSENBRENNER. This was with the team that came from Denton, Texas.

Mr. KWIATKOWSKI. That was the team from San Francisco. The team from Denton, Texas came in. We were requested by the White House to do a resurvey. We contacted Region VI to ask them to come in and do the resurvey. And as we testified before the Senate committee,[73] the following morning we tried to notify our Region IX to advise the state. And, unfortunately, that notification did not get to the state, which would be the Emergency Management Office, until there had been some news releases in Washington that a second team was coming in. So, there was an unfortunate missed communication there.

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[72] Mr. Kwiatkowski altered this to read, ". . . there are two sides to the disaster relief program."

In the case of the appeal, the Governor's appeal was filed on June 15th. On June 17th, we notified the state we were ready to come in, and that being the Emergency Management Office, again. I tried to notify the Governor's Office myself this week. The lines were down in Nevada. We sent a telegram to advise them of the interim notification.

Mr. VOLKMER. Would the gentleman yield?

Mr. SENSENBRENNER. I yield to the gentleman from Missouri.

Mr. VOLKMER. You skipped over, Mr. Kwiatkowski, the first instance. You say you were in there the day after.

Mr. KWIATKOWSKI. That is correct, sir.

Mr. VOLKMER. You did not tell me what you did with the Governor's Office.

Mr. KWIATKOWSKI. The Governor's Office requested us to come in, sir.

Mr. VOLKMER. I know that. But what did you do with that? Did your people say, "We are going to be in. We want to work with you."

Mr. KWIATKOWSKI. No. We come in—we advise the state——

Mr. VOLKMER. All on your own?

Mr. KWIATKOWSKI. Yes, sir—I beg your pardon?

Mr. VOLKMER. You did it all on your own?

Mr. KWIATKOWSKI. No, no, no. We came in with the state. We advised them we were coming. We told them when we would be in. And in every case, when we do a damage assessment, we do it with state and local people, so we have to advise them we are coming. There was notification to the state. They invited us. We told them we were coming on the first team from San Francisco. That is absolutely right.

Mr. VOLKMER. And you are saying that the state agency people then assisted you in making that first evaluation?

Mr. PETERSON. Absolutely, sir.

Mr. KWIATKOWSKI. Absolutely, sir. Absolutely.

Mr. VOLKMER. I yield back.

Mr. SENSENBRENNER. A couple of other questions. In your testimony you said that the Governor's request estimated initially the damage to publicly-owned facilities as well as the St. Rose de Lima Hospital at $1,118,000, but your estimate of the uninsured public sector damage was $403,000. How do you explain that disparity?

Mr. KWIATKOWSKI. The $1 million was the insured damage—was [74] the total damage and the 403 was the residual uninsured.

Mr. SENSENBRENNER. Which included the deductible.

Mr. KWIATKOWSKI. Yes, sir.

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[73] Hearings before the Subcommittee on Water Resources, Transportation and Infrastructure, Committee on Environment and Public Works, United States Senate, June 8, 1988.

[74] Mr. Kwiatkowsiki deleted the word "was."

Mr. Sensenbrenner. Those would be covered if there was a Presidential declaration?

Mr. Kwiatkowski. That is correct. And the program that would be offered would be a program of reimbursement at 75 percent Federal sharing and 25 percent state and local.

Mr. Sensenbrenner. Mr. Volkmer and I went this morning up into Green Valley and we went into a residential street that was closest to the PEPCON plant and observed the damage there and the reconstruction work. There was one homeowner that had a big sign that said, "Unhappy Homeowner" put in the front yard and we knocked on the door because we wanted to talk to the unhappy homeowner, but apparently he or she was already down here because there was no answer.

But one of the things that we were told is that one of the major insurance companies is now taking the position that since the homeowners' policies contained an exemption from coverage for movement of earth, they are saying that movement of air such as the explosion and the percussion that resulted would also get the insurance company off the hook.

Now, I recognize that that is an issue that is probably going to be decided in the courts, if the insurance company is foolish enough to take that position and thus lose all of its business in southern Nevada when the policies come up for renewal. But if the insurance company does get off the hook as a result of a court decision that the damage that was caused by the explosion is excluded, what would FEMA's response be then, because then obviously there would be a huge gap in coverage and it would be a gap in coverage that we would find out about a year or two after the courts do their thing.

Mr. Peterson. First, I would like to say that as a small businessman myself for 13 years and having dealt with disagreements with insurance companies occasionally, I have found that state insurance commissions are extremely helpful in these kinds of disagreements. And I just would like to put that on the record.

That would be a very extenuating circumstance, sir. And the problem with it is that the result of that, if it went to the courts, could be very delinquent in coming as far as the results. And I would have to look at how we could deal with that in the future. It would be additional information, there is no question about that.

Mr. Sensenbrenner. I would appreciate an answer to that question because obviously if this insurance company ends up getting off the hook of its reinterpretation of the policy, the total amount of uninsured damage goes way, way up here. And I do not think that there would even be any room for question on whether or not a disaster declaration was the proper response.

Mr. Peterson. I am going to turn this over to a person who is the manager of this, but also we have another individual that has been at this since Day One almost for an answer on that particular issue, in specifics under the law.

Mr. Kwiatkowski. Well, first of all, sir, I would say that if we knew that there were a vast number of people who had this kind of problem with their insurance company, we would take that into consideration. We—when a declaration is made, after a declaration is made, there is benefit as part of the law.[75] And, if an insurance proceed is in doubt, we have proceeded in the past to go ahead and make some payments to individuals. But they have to agree that if an insurance proceed later becomes available, they would have to repay it. But, first, we would have to know if there is a large number of these cases and, in which case, it might have an impact on our recommendation. But we certainly cannot step in where insurance companies should be, but we will help people. We never turn our backs on people if there is something in doubt. We will have to collect later.

Mr. **Sensenbrenner**. Nor should the taxpayers expend their money to provide payments for things that are covered under insurance. That is flat-out bad policy. And I do not think anybody really would quarrel with the fact that that is bad policy. But, you know, my concern is that one insurance company in particular has been making noises that this would be a policy defense which would exclude coverage. And I think that that makes the equation a heck of a lot different than the equation that has been presented here.

Mr. **Peterson**. I certainly would recognize your point.

Mr. **Sensenbrenner**. Thank you. I have no further questions.

Mr. **Roe**. The Chair recognizes the gentleman from Missouri, Mr. Volkmer.

Mr. **Volkmer**. Yes. I would like to know when the first team was sent in here, how many people were in that first team?

Mr. **Kwiatkowski**. I do not have the exact figure, sir, but I can provide that for the record. But just as an educated guess, I talked to Joe while they were out there, I believe they had about seven teams which would indicate to me they had probably 10 to 15 Federal people from FEMA, not counting yet the SBA representatives who were also on the team and working with the Red Cross. And then we had the state and local people.

[The following data was submitted for the record:]

1. How many people were there in FEMA's first damage assessment team?

FEMA had 5 people total; 1 person stayed at a central location and collected information from the teams, gathered insurance information, etc. The other 4 headed each team. There were State and local personnel on each team. In most circumstances, there was a City Building Safety inspector included. The number of State and local people varied daily, depending on the number of people available and the area that was being surveyed. In addition, Small Business Administration had 4 people in the field. Although they were usually gathering information for the SBA programs, at times they assisted the FEMA teams.

When we go into an area, we like to look at the area with state and local people. We like to at least agree on the numbers.

Mr. **Volkmer**. All right. Now, based on what—Mr. Peterson, in your statement, I would like to know your basis for saying that there were 8,000—I cannot find it exactly, but I know it was in there. About 8,900 homes and 278 businesses were affected; impact on private property. That is on page 4 of your statement.

Mr. **Peterson**. Yes, sir. That was a result of our coming here and working with the state and the locals and the teams, as a whole, and they collectively agreed upon that as the number in dealing with the issue.

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[75] Mr. Kwiatkowski amended this sentence to read: "After a declaration is made, there is a duplication [of] benefits section which is part of the law."

Mr. VOLKMER. That was not based upon assessment evaluation of each individual home, but based upon a telephone survey, was it not?

Mr. PETERSON. I am not aware that that was based on a telephone survey.

Mr. KWIATKOWSKI. Actually, sir, the first survey was conducted—there were some homes that were visited. They do two kinds of things. They do windshield surveys. They go with the state and locals and count the number of homes affected. They get a sampling of the damage, look at the similar number of homes affected in the same way. And I believe the 8,900 is a result of some telephone and mostly by physical on-site count.

Mr. VOLKMER. And then later on in this statement, you say that, the factor—on page 5(D), "The next factor is availability of insurance to assist in recovery. The Nevada Division of Insurance reports that over 11,000 claims have been filed. The average claim for home and personal property damage is $3,720 and the average deductible is $233. The small average deductible makes it clear that the majority of damage was covered by insurance." Do you base that on a factor of 8,900 damaged properties and you have got 11,000 claims. So, everybody has got to be insured?

Mr. PETERSON. Well, we are hearing that it is a very, very high insurance coverage, sir. And I think you beg the initial question, initial response, and that is in addition to the Nevada Insurance Commission; we have verification from the American Insurance Association that the accident is 95-plus percent insured, which is one of the highest ratings that they can give for a disaster. So, I think there is a very high substantiation in a high factor of insurance coverage. Yes, sir.

Mr. VOLKMER. Let us assume that we have 95 percent coverage. We have got 11,000 claims. Would you assume that on those 11,000 claims that those are all each individual claims or are there some duplicate claims in there by one individual making more than one claim?

Mr. PETERSON. There is probably more than one item involved. You have homes here involved and I think it is very possible that you have some automobile claims here as well in this 11,000 figure.

Mr. KWIATKOWSKI. Actually, if I can correct that. We have information that there has been over 250 automobile claims filed, in addition to over 11,000 home and personal property insurance claims filed.

Mr. VOLKMER. We have got over 11,000 homes and personal property claims filed. Right?

Mr. KWIATKOWSKI. That's correct, sir.

Mr. VOLKMER. That would tell me that there is about 600 people out there that do not have any insurance. Right or wrong? 95 percent of what figure gives you 11,000?

Mr. PETERSON. Let me say that my understanding of the 95 percent figure, and I would like clarification from my staff here, is that that is the highest figure they can give is 95 percent. It does not mean that there is only 95 percent. My understanding is that is the highest figure they put out.

Mr. **Volkmer**. So, what you are telling me then is you do not know how many are out there.

Mr. **Peterson**. Well, we know that at least 95 percent and our survey would indicate that that certainly was a valid figure and it may be higher.

Mr. **Kwiatkowski**. I would say also that in the second survey, when they wanted to be sure of the insurance coverage, when they interviewed 100 homeowners at random and they only found one person that was not insured, I am sure that there might be a few people that are uninsured, but we cannot recommend something based on what might be. We were going on the highest statistical average that we could find based on our outside verification.

Mr. **Volkmer**. You were going on, basically, statistically averaging along with verification, but not total verification. That is quite clear. I was a little discouraged, too, about what the Chairman said that there was never any effort made nor was there any publicity made when you were doing—between any of these evaluations, even this third one to let people out there, "If you do not have any insurance on your place and you have got damages, please notify us at such-and-such an address." You have not done that. Have you?

Mr. **Kwiatkowski**. Sir, I believe the city has been doing that. They have had public information out that uninsured people should be calling in. In addition to which the Red Cross in the early days of the incident put out a public information release that people who did not have insurance could also come in. And we take all those things into consideration, as Mr. Peterson mentioned. Only 20 uninsured people applied for Red Cross assistance. And the names that we have gotten from the public information effort on behalf of the city is [76] being used in our current survey. So, there was public information. And people who were uninsured were asked to call in to the city hall and file their name.

Mr. **Volkmer**. Sorry I had to step out for a while while you were testifying. I would just like to know—have you completed this third survey as a result of the appeal?

Mr. **Kwiatkowski**. No, we have not, sir.

Mr. **Volkmer**. Have you determined in this survey if there is any additional non-insured out there that you did not have before?

Mr. **Kwiatkowski**. There has been some identified, but, you know, we are here for as long as it takes. And we are very preliminarily into this at this point.[77] They worked on it yesterday. And we are giving all the time and latitude necessary for every single thing that the state and local governments can identify to us for us to see. So, I say this very respectfully, but it is so premature that to get into that kind of response, you know, almost would be conjecture at this point, sir.

Mr. **Volkmer**. As I understand it, on the school system, the school system had insurance. Is that right?

Mr. **Peterson**. Yes.

Mr. **Kwiatkowski**. Yes.

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[76] Mr. Kwiatkowski changed "is" to "are."

[77] Mr. Kwiatkowski amended this sentence to read: "And the survey is very preliminary at this point."

Mr. **Peterson**. That is correct; and the hospital, too.

Mr. **Roe**. And, so, what their loss would be is on the deductible?

Mr. **Peterson**. That is my understanding, sir.

Mr. **Volkmer**. But even if that is—the school system is public property, the amount of the deductible would be included as a public property, you would not include that public school system. Is that correct?

Mr. **Kwiatkowski**. We count the uninsured, the deductible into our assessment on the public damage. And if there were a declaration, the Department of Education, they would have to apply with the Department of Education for assistance.

Mr. **Volkmer**. U.S. Department of Education.

Mr. **Kwiatkowski**. That is correct.

Mr. **Peterson**. That is correct, sir.

Mr. **Roe**. Would the gentleman yield on that point?

Mr. **Volkmer**. Yes.

Mr. **Roe**. Does that require the Department of Education to function under a declaration or does the Department of Education have any latitude *vis-a-vis* the same relationship that SBA has?

Mr. **Peterson**. My understanding is that the Department of Education is triggered under the declaration, where the SBA does not have to be triggered by a declaration, sir.

Mr. **Roe**. That is your understanding. Do you know if that is a fact or not?

Mr. **Peterson**. Yes. That is a fact, sir.

Mr. **Roe**. So, in order for the schools to be eligible, there would have to be a declaration.

Mr. **Peterson**. That is correct, sir. And then it would go to—

Mr. **Roe**. Does FEMA have a right to declare a limited declaration?

Mr. **Peterson**. Yes, sir. We could declare public [78] only.

Mr. **Roe**. Is FEMA considering that? Will FEMA consider that?

Mr. **Peterson**. We consider all the factors, yes, sir.

Mr. **Roe**. The gentleman from Missouri; are you finished?

Mr. **Volkmer**. No, I am not finished. I would just like to read you two gentlemen something that is in your report. "Memorandum to the President, Nevada, Federal Emergency Management." Are you familiar with this?

Mr. **Peterson**. Yes.

Mr. **Volkmer**. Do you have a copy?

Mr. **Peterson**. I do not think we have one with us.

Mr. **Volkmer**. We will get you a copy down because under "Public Assistance," on page 2, second paragraph: "Eligible public school damage covered under separate authority of the Department of Education in the event of a declaration. Damage to all injured secondary schools was estimated $900,000 and is not included in FEMA's estimate." Not included.

Mr. **Peterson**. I have to get this, sir.

Mr. **Volkmer**. "The school district maintains insurance that will cover all costs except for $250,000 deductible." The thing is it is not included in the estimate.

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[78] Mr. Peterson inserted "assistance" here.

Mr. PETERSON. The estimate——

Mr. VOLKMER. On public damages. That $250,000 is not included.

Mr. PETERSON. We include the deductible in FEMA's estimate, but not the $900,000 total damage.

Mr. KWIATKOWSKI. The $403,000 we quoted has $250,000 of deductible in that figure. So, the deductible is considered, sir.

Mr. PETERSON. When we report damages, sir——

Mr. VOLKMER. I will tell you what you can do for us, so we can get along with this hearing. You can submit it to us in writing a list of the public damage assessment to arrive at that 400,000.

Mr. PETERSON. Okay.

Mr. VOLKMER. Okay. You have got that somewhere.

Mr. PETERSON. You are asking for the unmet needs, sir?

Mr. VOLKMER. Right. Right. On the public.

Mr. KWIATKOWSKI. We reported on the eligible damage. We will give you both.

Mr. VOLKMER. Which will include that $250,000?

Mr. PETERSON. Yes, sir.

Mr. KWIATKOWSKI. Yes, sir.

Mr. VOLKMER. Thank you, Mr. Chairman.

[Mr. Peterson submitted the following data for the record:]

2. Of what is our $403,000 in uninsured Public Assistance damage comprised?

Potentially eligible damage under Public Law 93-288 to public property was $402,882, rounded to $403,000.

Category B, Emergency Protective Measures	$34,300
City of Henderson	24,300
Clark County	10,000
Category E. Restoration of Public Facilities	*368,582
City of Henderson	95,110
City of North Las Vegas	2,222
Clark County	10,250
St. Rose de Lima Hospital	114,000
Clark County School District	250,000

*This figure is FEMA estimate of net eligible costs after insurance.

Mr. ROE. The Chair recognizes the gentleman from California, Mr. Konnyu.

Mr. KONNYU. Thank you, Mr. Chairman.

First of all, Mr. Peterson, Congressman Bilbray in his opening remarks referred to a faceless bureaucrat in Washington who said "no" to the citizens of Henderson. Are you that faceless bureaucrat?

Mr. PETERSON. Thank you for the question, sir. I am going to give you just a very short litany. Five years in the United States Air Force, Strategic Nuclear Weapons; thirteen years as a businessman running my own businesses; five years as an elected official, elected as a county commissioner, appointed by the President, confirmed by the United States Senate. I do not consider myself a faceless bureaucrat, sir.

Mr. KONNYU. Second of all, why did it take 34 days?

Mr. PETERSON. That is a very appropriate question and I think it is valid to go over the chronology so that it is clear on the record—and Mr. Kwiatkowski was intimately involved in those processes and I would like for him to cover for you some trigger dates so that you understand—and then I think it is appropriate for us to explain to this committee what is our policy after we make a recommendation to the White House.

Mr. KWIATKOWSKI. Sir, I can provide for the record the full chronology that was provided in the Senate testimony several weeks ago.

[Mr. Kwiatkowski submitted the following chronology for the record:]

CHRONOLOGY OF EVENTS

NEVADA EXPLOSION

May 4: *Explosion occurred at Pacific Engineering and* Production Company, approx. 11:48 a.m.

State requested assistance for preliminary damage assessment from FEMA Region IX.

May 5: FEMA Region IX team arrived on site and commenced damage assessment jointly with State and local government representatives.

FEMA Team Leader accompanied Senator Hecht on tour of the area.

May 6: On site assessment completed. Personnel returned to San Francisco to prepare reports.

May 7: Regional Summary, and Regional Analysis and Recommendation compiled in San Francisco office.

May 9: Regional Summary, Analysis and recommendation and a copy of Governor's request faxed to FEMA Headquarters, DAP.

May 12: FEMA recommendations delivered to the White House.

May 13: After discussion with White House staff, FEMA provided additional information.

May 18: FEMA advised Governor Bryan that a decision would be reached within 48 hours.

May 23: FEMA staff met with White House staff and discussed the Nevada situation.

May 24: 2:15 p.m. FEMA staff met with Senator Harry Reid regarding Nevada request.

3:30 p.m. White House requested and FEMA agreed to do a resurvey.

May 25: 10:00 a.m. FEMA staff interviewed by Nevada media.

1:00 p.m. FEMA advised Region IX to notify State officials of resurvey.

4:00 p.m. Region VI met with State and local officials in Henderson, Nevada, to plan for damage assessment to begin the next day.

May 26: Damage assessment started.

Director and FEMA staff met with Senators Moynihan and Reid.

May 27: Assessment concluded.

May 31: FEMA met with White House staff.

Reassessment information received from Region VI.

June 1: Supplemental information provided to White House.

June 8: Declaration decision.

Mr. Roe. We are still having trouble hearing because that microphone is broken.

Mr. Konnyu. I do not think it is appropriate to go over five minutes.

Mr. Kwiatkowski. I will not. Basically, I can tell you that the damage assessment, the first damage assessment was conducted on May 6th, the summary was compiled in San Francisco on May 7th, provided to FEMA headquarters on May 9th and we delivered our recommendation to the White House on May 12th.

And, Mr. Peterson, I guess you can talk about the FEMA policy.

Mr. Peterson. So, we had the first survey done and in the hands of the White House by May 12th, sir. From that point in time, it is in the White House hands. And we then heard back from the White House that on the 24th that they felt a resurvey might be appropriate. And we concurred with that and went back out. So, there was that time frame where there was consideration, obviously, for a second survey in order to be absolutely certain that we had all the information we could get. And that time block in the second survey is unusual because in the history that I researched, it is very unusual that we go out for a second survey prior to a request for an appeal from a governor.

So, in trying to be very cautious and trying to be very certain, there was some extra time used, sir.

Mr. Kwiatkowski. I might add, sir, that in the Senate hearing, when the chronology was discussed, Senator Symms [79] actually commended FEMA for moving with dispatch in getting the report in as quickly as possible.

Mr. Konnyu. The initial 8-day period I thought sounded expeditious. Let me now turn to Governor Bryan's testimony. He stated that in the first two surveys some damages had been missed. Did the Governor properly quantify and, specifically, what are these missing items that should have been identified? In other words, did he point you to specific places? Was there a list with specific addresses or was there just a general statement or policy? And on that basis he asked you to look for a third time?

Mr. Peterson. There was no definitive line-item attachment to his letter. The Governor wrote to us and asked for an appeal and under our regulations, there has to be reason for an appeal. The reason that was given by the Governor that there was previously undetected structural damages. We accepted that on its face value and notified the state that we would come back and we would bring a special team of experts on structural damages and that they should be ready to show us—the state and local governments—where that damage is. But it was not specifically quantified in the letter, no, sir.

Mr. Konnyu. So, while the team is here—I guess it arrived yesterday—and is here today and will be here for some more days, that you do not have specific things that the Governor pointed you to or his staff pointed you to go to, but rather you are waiting from the city of Henderson officials to develop this data?

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[79] Hon. Steve Symms, Senator from the State of Idaho.

Mr. PETERSON. Well, there was nothing in the letter. That is correct, sir. We have arrived and it is my understanding in the very short briefing I received last night that the local and state officials have identified and do have some lists of sites that they wish for us and the private consultants to visit. And they are doing that yesterday and they are doing that today, as I understand it, sir.

Mr. KONNYU. Then is it the hope of the local officials that once you go to that detailed level that some new higher numbers will be quantified? Is that the ball game?

Mr. PETERSON. I believe that that would be in concert with the tone of the letter we received from the Governor requesting the appeal. He is asking us to come back because he feels there is additional damage we have not seen. We are here.

Mr. KONNYU. In business it's traditional for the claimant to make a claim as high as possible and for the payer or the prospective payer to make it as low as possible; perhaps that is what is behind these damage dollars where one says it is 3 and the other said it is 23. And there are numbers in between. In your experience, Mr. Peterson, do you find governors and state officials asking for a fair amount in their request to your office or do you find them asking ambitious amounts, on the whole?

Mr. ROE. The Chair asks the gentleman to yield.

Mr. KONNYU. I yield to my Chairman at anytime at his request.

Mr. ROE. I do not know whether that is a valid—that is a conjectural question and I do not know if we want the witnesses, if the gentleman would yield, to be in that position.

Let me point out to you and to the other members of this committee the Chairman of the Science, Space, and Technology Committee—not the Chairman of the Subcommittee—personally wrote a letter to the President of the United States based upon the testimony that was given in the first response in Washington.[80] Now, I happened to chair that meeting and I did not write a letter to the President of the United States for any other purpose than I felt that the first review was not adequate enough, whatever the reason may have been or I would not have taken my time nor would I be in Henderson, Nevada at this particular time. So, I am not here on the basis of I pushed Mike and somebody blamed somebody else. But someplace in between the state government, the city government, and FEMA, there is a breakdown in the communications as how do people get the help. Now, that is government's fault at every level, from my point of view. Either that or you are telling us there is no legitimate purpose for us to be here in the first place.

Now, you would not have come back if you had not been directed by the same President who appointed you to come back and look the third time. Is that a fair commentary to make? Now, I want it abundantly clear that this committee is not pleased at the moment, whatsoever, or we would not be here anymore than I want to heap all the burden upon FEMA. I do not think it is totally your responsibility, but the gentleman would lead further, before we leave Nevada, I would like somebody to clear up this "Feds Admit Blast

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[80] See appendix II-1.

Game. FEMA Says Political Football Affects Henderson's Aid Visit."

And then a gentleman, whether he is faceless or not by the name of Phillip Cogan—is Mr. Phillip Cogan [81] in the room?

Mr. COGAN. Yes, sir.

Mr. ROE. Well, then, Mr. Phillip Cogan, you are quoted here in a couple of places as help coming back and saying that you believe—where is Mr. Cogan? Would you raise your hand?

That you are talking about this issue being political. And I quote from the paper,[82] and you may be misquoted. I hope you are. "A Federal Emergency Management Agency official acknowledged Thursday, politics, quote, may enter into how many times we come out here. FEMA regional spokesman Phillip S. Cogan was quoted as saying that a decision on whether to recommend disaster aid would not be based on politics. Early in the day, Cogan also said that it was unusual for a FEMA team to visit a potential disaster area more than once before an appeal was made by the Governor."

Now, come on, fellows. You know, that is not good enough. What is FEMA's position? Is it a political machination we are going through here? Is it a legitimate concern for the people? That is what the Chairman would like to know. And, yes, Mr. Peterson, you can answer.

Mr. PETERSON. I would like to answer both of your questions.

Mr. ROE. I hope so, sir.

Mr. PETERSON. The first one was did this President direct us to come back here a third time? Mr. Chairman, we are here in responding to a request of a governor of a state——

Mr. ROE. On an appeal.

Mr. PETERSON. On an appeal.

Mr. ROE. Of course, I know that.

Mr. PETERSON. That is standard procedure. We honor and respect the intent of that request.

Mr. ROE. Do you consider the Governor's request, if the gentleman will yield to me, do you consider his request to be political? Do you think his appeal is political?

Mr. PETERSON. To go to the next portion, I am not involved nor is this Agency involved in any political shenanigans——

Mr. ROE. Does Mr. Cogan understand that?

Mr. PETERSON [continuing]. Whatsoever. And I am the political appointee for this directorate——

Mr. ROE. And I am the Chairman of this committee, sir. I invited you to testify. I am asking you a question. Does Mr. Cogan speak for you or do you speak for the Agency?

Mr. PETERSON. I speak for my Agency, and I am telling you unequivocally, and I respect you letting us come here and say that, that this Agency——

Mr. ROE. This is not political?

Mr. PETERSON. This Agency, sir, is not involved in any political shenanigans.

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[81] Mr. Phillip Cogan, Public Affairs Officer, Region X, Federal Emergency Management Agency.

[82] Michael L. Campbell, "Feds Admit Blast Games," Las Vegas *Sun*, 24 June 1988, p. 1A.

Mr. ROE. Then the Chairman will drop the issue. I am hearing you, as a representative of the Agency, you do not consider this to be a political machination whatsoever. Is that correct? Is that what you are saying?

Mr. PETERSON. I do not know how to put any more emphasis on it, sir, absolutely——

Mr. ROE. Then you have done very well. The Chair recognizes the gentleman from California.

Mr. KONNYU. Thank you, Mr. Chairman. I will not continue with that same question in deference to the Chairman. However, let me go someplace else. Is it fair to say that state and local officials must prove, Mr. Peterson, sufficiency of damages as opposed to you proving it or you developing it? In other words, the moving party in these processes, is it not the state and local officials and that they have to have the documentation and they have to have the proof? And that you review and have a certifying authority on it?

Mr. PETERSON. I think that is fairly stated. And we would recognize the extreme concern of the state and local people to look at all of these issues and provide that information to us and help us in identifying it and evaluating it. I think that is fairly stated, sir.

Mr. KONNYU. Given that condition, your office is now giving, obviously, according to your own rules, a third chance for state and local officials to prove the sufficiency and the certainty in terms of dollars of damages. Is that not the case?

Mr. PETERSON. I am sorry. Would you restate that question, sir?

Mr. KONNYU. That you are now giving not the first, not the second, but effectively the third chance for state and local officials to prove the dollars of damage?

Mr. ROE. Would the gentleman yield further? That is not correct. The gentleman, Mr. Peterson, expressed that under the law as written by the Congress of the United States and signed by the President of the United States, that a governor has the right to appeal if he does not agree. So, nobody is giving a third chance. He is doing what he is eligible to do under the law. Is not that a fair commentary?

Mr. KONNYU. Would you then, Mr. Chairman, accept the word "opportunity" as opposed to chance? Is that a better definition?

Mr. ROE. I do not think they are giving him anything. The Governor had a right to appeal under the law.

Mr. KONNYU. What I am trying to raise and specify, Mr. Chairman, is that in this way there is now a third occasion or opportunity, if you wish, to come up with some certified set of numbers that people can start believing.

Mr. ROE. The Chair will accept the eloquence of the gentleman from California.

Mr. KONNYU. Thank you. You are one of the very few who has ever made that claim about me, and I really appreciate it. [Laughter.]

Well, with that fine finish, I think I had better stop, Mr. Chairman. Thank you very much.

Mr. ROE. I understand Mr. Volkmer has a question.

Mr. VOLKMER. Yes. I was just reading that article that the Chairman alluded to. I find at the tail end and I would like for you to comment on this. It says, "Henderson City Manager Gary Bloomquist * * * is now estimating the amount of uninsured damage to the area to be $20 million, $3 million more than the assessment of last week." [83] So, we are up to $20 million. Do you agree or disagree?

Mr. PETERSON. I agree you said it and we are certainly here and would like to give them every opportunity in the world to present that factual information to us, sir.

Mr. ROE. Before I call——

Mr. VOLKMER. Mr. Bloomquist is going to be up here to testify.

Mr. PETERSON. Yes, sir.

Mr. VOLKMER. But he has not documented that to you or to your personnel as of this time?

Mr. PETERSON. At this point in time, not having been with the team all day, I do not believe it has been documented at this point in time. But believe me, we are here to look at every single thing that can be presented to us that qualifies under this law. We are here for that reason.

Mr. ROE. And now, our distinguished—I am sorry.

Mr. VOLKMER. I wanted to——

Mr. ROE. I thought you were finished. Go ahead, sir.

Mr. VOLKMER. I thought I was too, but I see in that article, it mentioned a statement by somebody else, by some other official, that you all had not notified the Governor's office on the second trip. Is that correct or incorrect?

Mr. PETERSON. I would like Mr. Kwiatkowski to take that, please.

Mr. KWIATKOWSKI. We did notify the Governor's Office through the Emergency Services Office, of the second trip. It was after there was a press conference, that is correct.

Mr. VOLKMER. I think you testified to that.

Mr. KWIATKOWSKI. Right.

Mr. ROE. The Chair recognizes the gentleman from Nevada, Mr. Bilbray.

Mr. BILBRAY. Yes. Mr. Peterson, were you in the first team that came out? You were not, were you?

Mr. PETERSON. No, sir.

Mr. BILBRAY. Because I met with several members of the first team. Are you still operating out of my district office? I think you are, are you not?

Mr. PETERSON. I know that there have been meetings in your office.

Mr. BILBRAY. Where are you set up right now? Where is your FEMA team working out of?

Mr. PETERSON. The Civic Center here.

Mr. BILBRAY. Okay, out of the Civic Center. And what is your phone number? Have you made that—does the world know what that is? What is your emergency number?

Mr. PETERSON. What is the Federal Emergency Management Agency——

Mr. BILBRAY. No. What number do they call in here locally?

Mr. PETERSON. We rely on the local and state government to set those policies. We spoke to that earlier, sir. And I think it is very appropriate that we allow the state and local governments to be on point for that, sir.

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[83] Campbell, "Feds Admit Blast Games," *op. cit.*, p. 4A.

Mr. **Bilbray**. You do not know the number?

Mr. **Peterson**. I do not personally know the number——

Mr. **Bilbray**. Does anybody here from FEMA know the number?

Mr. **Peterson**. It is not a FEMA number, sir.

Mr. **Bilbray**. I mean but does anybody even know—it is not a FEMA number, but there must be—could you even tell somebody in the audience right now what number to call?

Mr. **Peterson**. I cannot tell you what number the city has put out for the citizens to call to, nor the county, nor the state government, sir. That is not my role.

Mr. **Bilbray**. Let me ask you what—I know how the City of Henderson is doing their analysis. It is, basically, one, I think, presumably, like you are doing: they are calling up, surveying, taking an average based on what the average loss is. Now, is that the same method you are using? You cannot go to 11,000 homes and ask every one of those individuals how much they have lost. Is that correct or am I wrong?

Mr. **Peterson**. That is correct, sir. And it has been policy for a long time and the state and local people are trained—if they take availability of our training courses for processes—I believe it is totally appropriate that the Federal Government does not get in front of local and state government in dealing with their citizens. We rely upon the state and local governments to make those kind of contacts, provide us with the information, and we will spend whatever time is necessary to bring whatever professionals are necessary in here to evaluate that information, sir.

Mr. **Bilbray**. If I recall, on the first trip when I met with the representatives of FEMA, you came in the second day. I met with you in my office here in Henderson. And I think you were two or three days—in fact, you were supposed to be done, the FEMA officials said that they would be done the next day, which was about 48 hours of assessment. Now, maybe you stayed 72 hours, maybe you stayed longer. But what they told me at the time, they were to be here about 48 hours.

During that 48-hour period, that team, I presume, gathered all the information that they then submitted in that first report. Is that correct?

Mr. **Peterson**. I do not know if there was supplemental information submitted. I believe the vast majority was collected there. I would like to defer——

Mr. **Bilbray**. Well, that is my question. How can you do that in 48 hours? How can it be done in 48 hours with the extensive damage that was done?

Mr. **Kwiatkowski**. It is not unusual in any disaster situation, sir, to put enough teams in the field to survey the entire disaster area as quickly as possible—again, with state and local officials to show us everything that needs to be seen. And before we leave, we always check and say, "Have we seen everything that is necessary? Do you agree on the numbers?" And then we try and do it as quickly as possible, because if there is aid to be made available——

Mr. **Bilbray**. Originally, I heard you say 17 members are here presently. About 17 is what you have right now. And we do not know how many were in the first team. Is that correct? But it would probably be around 15? 16?

Mr. **Kwiatkowski**. I can provide that for the record, but I think about 15 teams.

Mr. **Bilbray**. Fifteen teams, but how many members per team?

Mr. **Kwiatkowski**. There is usually two or three—well, if you have a state and local and a Federal official and an SBA person, it could be three to four people per team.

Mr. **Bilbray**. All right. So, there could be as many as 45 people that were out there in that first team.

Mr. **Kwiatkowski**. That is correct. There could be.

Mr. **Bilbray**. We could get those figures. We would like to know. I would like to know that.

Mr. **Kwiatkowski**. Yes.

Mr. **Bilbray**. And then in 48 hours, we estimate there was somewhere between 8 and 11,000 homes damaged, plus numerous businesses. Is that correct?

Mr. **Kwiatkowski**. I can remember talking to the team that was out here the first time and, before they were finishing their survey, some individuals from Clark County asked them to go back out and look at another area, which they did. So, to the best of my knowledge, they looked at everything——

Mr. **Bilbray**. Each team would have to do about 900 residences, is that correct, if they actually physically surveyed the damages.

Mr. **Kwiatkowski**. As I said, sir, when you go into an area, and you start sampling an area of what kind of damage is, then you will do a windshield survey in some areas——

Mr. **Bilbray**. But that is the same thing Henderson has done, is what I understand. They surveyed. And, so, that is an acceptable method. Mr. Bloomquist, I presume, will testify that they have gone out and surveyed 5 or 10 percent of all the homes and businesses in Henderson and the area and they have come up with an average. Is that an acceptable method? I mean, it is like an assessment. Is that acceptable to your teams? They do not have to go out physically and have every single resident say, "We lost $250, or $500 or $15,000." That does not have to happen, right?

Mr. **Kwiatkowski**. That is correct.

Mr. **Bilbray**. Now, let me ask you about the deductibility. I met with the first team and they handed me a one-page sheet about like this which I subsequently gave to Gary Bloomquist. But it said, "This is our requirements." To the best of my knowledge, nowhere in that letter did it ever say that deductibilities were excluded from the sum that had to be taken into account, because I would have raised the question right away what the fact is—like I mentioned earlier in testimony, that I know my house in Paradise Valley, I originally—every once in a while, we would get a little BB shot and I would have to call the insurance company. They would fix the glass. Finally, the insurance I was with—my agent told me that Farmers was not going to allow anyone—in fact, at first, I think they just had a large deductibility. They would not just let you insure glass under any circumstances for 100 percent coverage. Then they went to something like 2 or 300 and I think they eventually said they would not cover residential glass at all in the house.

Now, if most of the damage that was done in the area—a lot of it was to glass in the windows and so forth, to the doors and such. And we show that even though—I mean, people were insured—that out of that insurance coverage of, say, $70 million worth of damage, that $20 or $30 million was not covered either from excess—but most of it from the deductibility clauses—you heard Rose de Lima's problem with 23 different structures at $5,000 per structure within the overall complex.

Kerr-McGee stated that they have a million dollar deductibility. And their damage is half a million dollars. That is what they told us last night. Even though they have a $300 million liability coverage, they have a million-dollar deductible and they have a half-million-dollar damages. I mean when you start taking just Rose de Lima and Kerr-McGee together, that is close to $650,000. And that is just two businesses. And I guarantee you we went down the street and we saw other businesses—that their walls were all ripped out, down in Sunset Road, that had to lose $50,000 to $60,000, each one of those areas. I mean it has to be much in excess of what you guys have come up with. And yet, I heard you state earlier that it is not a statute that says the deductibility could not be counted. It is really a ruling within FEMA? Is that correct?

Mr. PETERSON. That is correct. It is a policy and it is a ruling within FEMA.

Mr. BILBRAY. It is a policy, but it is not a law.

Mr. PETERSON. And in dealing with the businesses, we spoke to the fact that FEMA has great restrictions on dealing with those businesses. So, if we are rolling those figures in and you are saying those are business figures, then we need for the teams to identify where this is coming from.

Mr. BILBRAY. Well, let me tell you what bothers me is the fact that it is a policy of FEMA not to take the deductibilities, yet you can roll in the business figure; but all these people out here who own homes, you cannot roll their figures in. And they are the biggest losers, really, when you add them all up. And it is a policy—who makes that policy?

Mr. PETERSON. That has been in effect since 1974, when the law was written. It is our understanding that that policy was written upon what we felt was the intent of Congress at the time. It has been in place for 14 years and has not been challenged by Congress over probably thousands of declarations and declaration requests.

There is not really a program under Public Law 93-288 to address deductibilities for insurance. The only program that can is the Small Business Administration loan program.

There are very specific programs for individuals under the law. There is not one that addresses deductibilities of insurance.

Mr. BILBRAY. See, my problem with this whole thing, and I have mentioned it before, is the fact that if FEMA cannot handle—I can understand that: it is beyond your capacity; it is beyond what you can do. But I am just saying that somewhere in this great nation of ours that we have to cover this problem. We want to know. If FEMA says no, we accept that. We understand that you said no. We do not need to politicize it any further. Let us go the right way.

Mr. ROE. I would like you to do something for me today, if you will.

Mr. PETERSON. Yes, sir.

Mr. ROE. Obviously, the responses are not emotional, but intense, I would suggest, is a good word. And I think it would be profitable—if you have the time, we are going to call upon the city officials. And the Chair would like to take a little bit of license, that while we have the brothers and sisters together that are in the same room, lots of times we can get things solved, at least to the knowledge of what the Congress can or cannot do, what FEMA can or cannot do. With that thought in mind, I would appreciate it if you would stay a little while, while we talk to the city officials and the state officials to be next, so we can start to bring this together as where the lack of information may come from, or should there be more information. What can we do that may be helpful above and beyond the longer-range point of view when this hearing is over? What can we do right now, if that is possible? So, if you would be kind enough to wait a little, we would appreciate that.

There are no further questions at the moment. And I want to thank you for being up front and telling us your point of view and we appreciate your being with us and testifying today.

Mr. PETERSON. We would like to extend to you our appreciation for your courtesy and for the opportunity to come here and to try to be up front. We are all trying to do what is right for this country and for the people.

Mr. ROE. I appreciate that.

Mr. PETERSON. Thank you, sir.

Mr. ROE. Thank you very much.

Our next group of witnesses we are going to call on now is local officials, because I think it would be very appropriate now to kind of, not necessarily counter, but have a chance to reflect further while the folks from FEMA are here.

Having said that, we would now call on the Honorable Gary Bloomquist, who is the City Manager of Henderson. Better, first, I am sorry. Is the Mayor going to participate?

VOICE: Later.

Mr. ROE. He will be a little later. Okay. So, first, we have Gary Bloomquist, who is our City Manager, accompanied by Mr. John Finney, Director of Emergency, Henderson, Nevada. Is John Finney here?

VOICE: Yes.

Mr. ROE. And then we have Mr. John Pappageorge. Mr. Pappageorge is our Deputy Chief, Clark County Fire Department, Henderson, Nevada.

Mayor, if you would want to sit in with this group—because I understand the County Commissioner is not going to be able to be here. And suppose we defer to the Mayor?

Does the Mayor have an opening statement you would like to make; Mayor Kesterson?

Mayor KESTERSON. I would rather the City Manager spoke first.

Mr. ROE. Okay. Then we will defer to Mr. Bloomquist, our City Manager. Would you go ahead with your testimony?

STATEMENT OF GARY BLOOMQUIST, CITY MANAGER, HENDERSON, NV

Mr. **Bloomquist**. Thank you very much, Mr. Chairman, for the opportunity to be here, and I want to express our City's appreciation to all the members of the panel who showed up. My name, for the record, is Gary Bloomquist. I am the Henderson City Manager. We provided a list to you of a large number of people who could answer questions if any came up that we cannot answer. Jim Arrendale, you have seen already today. Bob Wentz has already testified. We have a citizen in the audience by the name of Pamela Walz who is also a concerned citizen and concerned about railroads. Questions came up on Red Cross and public assistance. Major Carol Ganot, of the Salvation Army, is here as well.

One person who I think is of particular importance when we get into discussing such items as FEMA and methods of analyzing damages and losses is George Brizendine, who is a local structural engineer who can deal with the complexities of analyzing actual losses that have occurred in the community. Reverend Louis Lyons is also here from the Methodist Church, if anybody wants to get into questions of psychological impacts, counseling, and damage—surprisingly, damage in remote areas.

Father Rich, you already heard, from St. Rose DeLima. Elaine and James Arnold are business owners who are prepared to testify today if time is available. But we will make a copy of an article that was written about them lately and the types of losses they have suffered.

Also, our fire chief is here. Dr. Joan Owen is a psychologist in the area who has been going full time ever since May 4, counseling children, adults, husbands, wives and if you are interested in the social and psychological impact that has occurred in the community, she would be very well prepared to answer those questions. And Brian Greenspun, the President of the Las Vegas Sun, just had to leave. Joe Titus, our building superintendent——

Mr. **Roe**. Would you pull your microphone closer to you, please? It is hard to hear.

Mr. **Bloomquist**. I do want to express at this time our strong appreciation to our own Congressman for arranging these meetings. And I also want to congratulate you, Mr. Chairman, for the meetings—not only scheduling this meeting today but for the non-partisan nature that I have seen from the three meetings that we had in your office last week. The fact that we were not only welcome to be in your office to arrange this meeting on such short notice, but the fact that your committee was well represented and it was apparent to me that your concern for this community was related in no way to politics, partisanship or those sort of accusations that you have probably heard flying around here today.

I was amazed that we got enough of your time to meet with you three different times last week, knowing what your schedule is like.

I would like to point out to the people in this audience that, with the strong statements that you have exhibited here on occasion, that it does not just happen in public, you did that to me in your office last week, too. And to me, it just exhibits the concern that is going on.

I would also like to mention that we do have an exhibit with you of a listing, chronological listing of newspaper headlines that have run in this area ever since the May 4 blast.[84] I do not think that Henderson, Nevada gets the attention nationwide that other areas might because we are out here in the desert, but the fact is, in the local area, the impact has been huge and it is a pretty good chronological story. We also have six hours of screened videotapes on the television coverage that occurred immediately after the blast, and which is still continuing up until this very time.

I have been asked by this committee to present real verifiable dollar losses to the community. And I will get into it a little more fully, but yesterday morning, we had additional meetings with FEMA. And I do want to say that I am not here as a FEMA-basher and I do not think FEMA is here as a City of Henderson basher. That is not the purpose of our meetings and I think people are trying to work together. But the reason I mentioned Mr. Brizendine is to point out the complexity of developing the numbers and the damage. You have a report from Mr. Brizendine [85] that shows the difficulty in analysis of some of these buildings. You will see a picture, for instance, of some nail pops on the top of a piece of wallboard. It turns out that those nail pops are not faulty construction and, for those of us who have been around construction, having used too short a nail in a piece of green lumber. Those nail pops are caused by structural shifts within buildings and in many cases are requiring hours to go back in and do the analysis of what actually happened to that building.

We just had to increase our own contract for our own city facilities to Mr. Brizendine from $10,000 to $30,000 in our last Tuesday night's council meeting because of the fact that more and more structural damage is showing up in our building.

Despite the fact I think FEMA is trying to do a very good job while they are here, I do have to disagree strongly with a statement that is in here that says, "Most of the damage consisted of broken glass, missing shingles, and unhinged doors."

That is not most of the damage that occurred in this area. And in the meeting that we had yesterday, we said, "How much knowledge do you need?" And it is the same question that Congressman Bilbray just brought up. "What is a reasonable sampling?" And is our five percent sampling a legitimate figure?

This is a small city. I need to point that out and I think everybody who has been here knows it is a small city. We are proud of the city. It is a progressive city, but it is small. Our entire building department is 10 people. And those 10 people, in this last month alone, had to issue 350 permits for over $8 million worth of damage just between the 4th and the 31st of May. Not only issue the permits, but go out and inspect on those permits.

[See Exhibit 1.]

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[84] See Appendix II-2.

[85] See Appendix II-3.

M-O-N-T-H-L-Y R-E-P-O-R-T

CITY OF HENDERSON

CITY HALL 243 WATER STREET 702/565-8921
HENDERSON, NEVADA 89015

Gateway to Lake Mead Resorts

BUILDING & SAFETY DIVISION
CONSTRUCTION PERMITS ISSUED

MAY
MONTH

1988
YEAR

TYPE OF PERMIT	THIS MONTH	LAST MONTH	THIS MONTH LAST YEAR	YEAR TO DATE	LAST YEAR TO DATE
SINGLE FAMILY	110	149	54	597	541
MULTI FAMILY (# units)	0	0	1	Permits Units 53 451	Permits Unit 1 2
RESIDENTIAL ADD'N REMODELING	20	13	12	117	77
PATIOS	19	38	21	121	74
CARPORTS/GARAGES	1	7	4	19	21
OFFICES, RETAIL COMMERCIAL	6	4	4	23	14
INDUSTRIAL, COMMERCIAL ADD-ON AND REMODEL	4	7	7	33	30
FENCES AND WALLS	128	120	121	511	554
SIGNS	9	5	4	30	26
GRADING/CONCRETE	13	13	10	56	44
POOLS	26	34	45	171	180
MISC. (churches, schools, municipal, mobile homes, etc.)	1 * 305	1	0	2 * 305	0
TOTAL	642	391	283	2,038	1,562

CONSTRUCTION VALUATION

* RECONSTRUCTION PERMITS FOR BLAST DAMAGES - ISSUED FREE - VALUATION IS ESTIMATED **

SINGLE FAMILY	$ 8,069,340	$12,281,752	$ 4,209,586	$ 43,277,503	$ 36,963,812
MULTI-FAMILY	0	0	57,000	16,338,936	57,000
RESIDENTIAL ADD'N REMODEL	158,694	119,746	105,922	922,565	671,118
PATIOS	29,060	43,354	45,750	156,279	111,000
CARPORTS/GARAGES	9,000	38,000	15,200	92,700	89,300
OFFICES/RETAIL COMMERCIAL	1,602,000	1,152,500	1,802,500	3,888,270	17,361,588
INDUSTRIAL, COMMERCIAL ADD-ON AND REMODEL	42,100	163,380	211,400	410,170	1,261,990
FENCES AND WALLS	276,533	409,083	327,187	1,400,781	1,603,300
SIGNS	48,725	33,280	16,000	132,335	107,850
GRADING/CONCRETE	6,300	6,600	7,200	29,700	22,940
POOLS	352,700	423,885	492,737	2,292,423	2,088,246
MISC. (churches, schools, municipal, mobile homes, etc.)	69,672 **$8,983,595	1,102,000	0	1,171,672	0
** NOT INCLUDED IN TOTAL TOTAL	$10,664,124	$15,773,580	$ 7,290,482	$ 70,113,334	$60,338,144

AVERAGE $29,454.41
DAMAGE

Joe Titus

JOE C. TITUS, SUPERINTENDENT
BUILDING & SAFETY DIVISION
DEVELOPMENT SERVICES

I suggested to the FEMA people when we met with them yesterday that if your sampling has to be large and if my figures are questionable, I am not the least bit adverse to having FEMA send in a large group of people, including structural engineers, keep them here for a long, long time and give us a larger sampling so that we can all agree to those numbers. I think right now, today, mine are the most accurate numbers there are and they come from a five percent sampling of damage.

We knew at the time we began developing these figures that we had 8,845 damaged units within the City of Henderson, residential and commercial. That came from calls into the insurance companies. We also know—I don't know where the 11,000 number came from county-wide. We have a 13,000 number. We will live with the 11,000 number.

But I also should point out that of 8,845 damaged buildings in this city, this city only has 17,000 buildings. In other words, 50 percent of the buildings in this city were damaged in that blast. And it is going to take us some time to go behind the broken windows and the crumpled garage doors and find out just how much structural damage occurred.

But in our polling, our sampled polling—and I will be the first one to admit it was only five percent—we showed 7.5 percent uninsured damage, or buildings with no insurance would be a better way to put it. Seven and a half percent is still a small amount of uninsured damage; 92.5 percent, in other words, is insured.

Seven and a half percent, at an average loss of $20,666 per unit means—and by extending that out to the number of damaged units in the counts, means that there is 20 million—and these numbers are going to be plus or minus and there may be plus or minus significant amounts—$20,149,350 of uninsured damage here in Clark County and approximately $3,100,000 of deductibles. And that was just from the residential units we could analyze.

We also have not given you any numbers on the cars that were damaged, inventories that were damaged, those sort of things.

Unfortunately, I now have another report, which is another report—new—since I wrote this yesterday, analyzing the 350 damage permits and inspections that were issued in May and that is a different number, again. But it appears to me that it is going to shift somewhere around this $20 million number. And the only way this $20 million number is going to get more accurate is with a larger sampling.

We think it is probably conservative. I did want to mention in response—I gave you written comments. I hope I get a second chance to do it because they are sure changing as the day goes on and my present written comments are becoming worse all the time.

I did want to mention in response to one question that came up about the state paying: Under the state tax structure in this state, if the state pays, Henderson loses, and so does every other city in the state because of the way the tax structure works here. So, if the state pays, they do not have enough money to distribute back to cities; we lay off police and fire fighters, and we do not see that as any particular gain at all. And you have heard everybody else comment earlier and I will comment myself about why we believe this is a Federal responsibility.

And you also need to point out, in regarding our city, we have already had enough difficulties with the insurance industry. We do not have any insurance ever since the day our insurance premium came in at over double what it had been the previous year. And we had to make a decision: Do we pay increased insurance premiums or do we provide services to citizens directly? Unfortunately, sometimes, you have to take that kind of risk balance. We began building a self-insurance program rather rapidly, held back staffing, held back other services and we have built our self-insurance fund up to at least some amount. And in order to make that self-insurance fund work, we have done things like: added new safety programs, implemented loss control programs, put a new training officer on staff. Those sort of things you should do as a responsible government to protect yourself against loss when you have got a self-insurance fund.

The best city in the country, in putting in safety programs and training programs, cannot do a thing about a plant a mile away blowing up and destroying a year-old fire station, destroying another new fire station three miles away and fracturing windows and blowing glass across the City Manager's Office, which is what happened. And we believe that there is a responsibility of the Federal Government to make good on those things because it was definitely a defense-related plant that blew up.

I already mentioned the increased amount we have had to pay to structural engineers. Bob Wentz mentioned this morning the 18 damaged schools and the 16,000 people who were evacuated.

And what I do want to say, and it is the comments we had in the office this last week. In our opinion, the past—those things that have happened over the last couple of months, can be healed over time by action being taken by this committee. We also think the future needs some healing. It was mentioned by one of our Green Valley residents today: We have been bringing this community together, the community works together. Overnight, it was split. I have seen our city battling with Clark County, which is doing everything it possibly can do to work with this city. And I think we are doing everything we can to work with them.

We have had neighborhoods divided over this issue. I think we are like any other solid American community. We support the space program. We support the defense industry. And I do not think this community is about to discontinue that support.

But if you get a chance, if this conference does not go on too long, I hope you will be able to see our Hillcrest neighborhood where nearly every home was damaged. These sort of things can get a little personal. My daughter and her son lived there and my wife tells her, "Get out of that house. Get the house for sale for any price, because now, you are a mile closer to another plant that could blow than you were to the one that did blow up." And they have had their windows blown out, their doors collapsed and the structural damage they have had to live with.

Right up the street from that neighborhood is Berkholder Junior High School. And you have heard some of the good fortunes that occurred there. The Hillcrest people send their kids, if they are that age, to Berkholder Junior High School and some of those kids just simply came home in terror. That junior high school is also a mile closer to the next potential blast—at least the one that exists in people's minds—than it was to the last one.

We, as a city, do have a desire to keep the jobs there in PEPCON and Kerr-McGee and we desire to continue seeing them to continue to produce that defense-related product. We wished that PEPCON could be built in a protected area far enough away to be safe. Isolated, so that civilization cannot encroach on it, but close enough to where people can commute to those jobs. Not just so that jobs can be saved, but you are dealing with a critical industry with highly-trained and highly-qualified people to function in that industry. And I do not think the industry wants to lose those people by being forced to move long distances away.

However, we did find that the substantial distance is required when you consider the fact that there were buildings damaged 20 miles away from that plant when the PEPCON plant exploded. We would also hope that any expansion of Kerr-McGee would follow the same approach and that, in addition, the appropriate Federal agencies, as well as the state and local agencies, would assure that the present operation is as safe in Kerr-McGee as it possibly can be. And we appreciate the fact that this committee has taken its time to go down there and view that plant.

We also believe, although it is something which you cannot deal specifically in state, county and local legislation, but that what we refer to as a county item within the center of Henderson should at some time be annexed into the city. There should not be this multiplicity of jurisdictions, oftentimes in competition with each other or dealing in bureaucratic decisions that stop other decisions from being made. And I think our local officials are responsible. However, with that site, which has been in those industries since 1942, 1943, we believe that that site coming into the City of Henderson would have the potential for permanent bankruptcy of the city. We just do not know what is on the site. We do not know what is in the soils. We do not know what is in the water. And we would ask that in your considerations, because this thing will probably want to occur someday, this annexation, that if at all possible you include money or discuss money or environmental assessments of those sites. And not only that but look at the potential of moving those sites up near the top of the list for Superfund monies if it should appear that Superfund monies should be needed.

With that, that is my comments. And if I might answer any questions, Mr. Chairman, I will certainly be pleased to do it.

[The prepared statement of Mr. Bloomquist follows:]

CITY OF HENDERSON
CITY HALL 243 WATER STREET 702/565-2323
HENDERSON, NEVADA 89015
Gateway to Lake Mead Resorts

June 24, 1988

TO: Representative Robert A. Roe, Chairman
and members of the Subcommittee on Investigations,
House of Representatives Science, Space and
Technology Committee

Gentlemen:

I AM GARY BLOOMQUIST, HENDERSON CITY MANAGER. THANK YOU VERY MUCH FOR THE OPPORTUNITY TO BE HERE AND TO PRESENT MY VIEWS ON THE IMPACT OF THE PEPCON AMMONIUM PERCHLORATE EXPLOSION HERE IN HENDERSON ALSO, PLEASE LET ME THANK YOU FOR THE OPPORTUNITY YOU ARE PROVIDING OTHER HENDERSON PEOPLE TO SPEAK ON THE FINANCIAL, SOCIAL AND PSYCHOLOGICAL IMPACTS THAT HAVE OCCURRED WITHIN THIS CITY.

I ALSO WISH TO EXPRESS OUR STRONG APPRECIATION TO OUR CONGRESSMAN, JIM BILBRAY, FOR WORKING WITH YOU TO ASSURE THIS MEETING. I ALSO WANT TO CONGRATULATE YOU, MR. CHAIRMAN, FOR EXHIBITING THIS PAST WEEK YOUR COMMITMENT TO NON-POLITICAL AND BI-PARTISAN SOLUTIONS TO THE DIFFICULTIES FACING OUR PEOPLE HERE IN HENDERSON. I SHOULD MENTION THAT IN FRONT OF YOU IS A LISTING OF NEWSPAPER HEADLINES WHICH IN THEMSELVES BECOME A CHRONOLOGY OF WHAT HAS OCCURRED HERE. THE ACTUAL ARTICLES ARE

IN A BOOK I HAVE BROUGHT TO THIS MEETING. I HAVE ALSO BROUGHT WITH ME SIX HOURS OF SCREENED VIDEO TAPES THAT VIVIDLY SHOW THE IMPACTS WE HAVE FELT.

I HAVE BEEN ASKED TO PRESENT REAL, VERIFIABLE DOLLAR LOSSES TO THIS COMMITTEE. LET ME SAY THAT I BELIEVE THE UNRECOVERABLE LOSSES APPEAR TO BE IN THE RANGE OF $20,000,000 - A NUMBER EVEN HIGHER THAN THE $17,000,000 FIGURE YOU, MR. CHAIRMAN, WERE GIVEN WHEN I WAS IN YOUR OFFICE THIS PAST WEEK. CERTAINLY MUCH HIGHER THAN THE $3,000,000 FIGURE THAT WAS PROVIDED AFTER THE SECOND FEMA INSPECTION TOUR. OUR FIGURE COMES FROM REASONABLY ACCEPTABLE SAMPLING TECHNIQUES; THE ONLY OPTION AVAILABLE TO US. THIS IS A SMALL CITY WITH A SMALL STAFF OF BUT TEN TOTAL PEOPLE IN OUR BUILDING AND SAFETY DIVISION INCLUDING SUPERVISION AND CLERICAL PERSONNEL. THESE PEOPLE HAVE HAD TO DEVELOP LOSS ESTIMATES FOR THE DAMAGED 8,845 UNITS IN THIS CITY (WHICH HAS A TOTAL OF 17,000 RESIDENTIAL AND COMMERCIAL STRUCTURES) WHILE ALSO HAVING TO INSPECT A MASSIVE AMOUNT OF ONGOING DAMAGE REPAIRS. OUR 5% SAMPLING HAS SHOWN 7.5% OF THE DAMAGE WAS TOTALLY WITHOUT INSURANCE. EXTRAPOLATING OUR 8,845 DAMAGED UNITS TO THE COUNTY-WIDE INSURED DAMAGED UNITS OF 13,000 SHOWS 975 TOTAL UNINSURED DAMAGED UNITS. THE AVERAGE LOSS TO AN UNINSURED UNIT SHOWS AS $20,666 OR A TOTAL UNINSURED LOSS OF $20,149,350 WITH NEW STRUCTURAL DAMAGE BEING UNCOVERED EACH DAY. GEORGE BRIZENDINE, A LOCAL STRUCTURAL ENGINEER, WILL EXPLAIN THE TYPE OF DAMAGE AND THE DIFFICULTY OF ANALYZING THIS DAMAGE LATER IN THIS

SESSION. IT SHOULD ALSO BE POINTED OUT, THAT THROUGH NO FAULT OF THEIR OWN, PEOPLE HERE ARE BEING FORCED TO PAY OUT AN ADDITIONAL $3,133,000 FOR INSURANCE DEDUCTIBLES. IT IS OUR OPINION THAT AFTER YOU HEAR DR. JOAN OWEN DESCRIBE THE PSYCHOLOGICAL AND EMOTIONAL IMPACTS ON THE PEOPLE HERE, AND AFTER WEIGHING HER COMMENTS ON THE PSYCHOLOGICAL IMPACTS AGAINST ANNOUNCEMENT THAT THE FEDERAL GOVERNMENT INTENDS TO PAY FOR RELOCATING PEPCON AND EXPANDING KERR McGEE, YOU TOO WILL WANT TO PURSUE ACTION TO ASSURE THAT THE PEOPLE HERE LOCALLY, WHO ARE MOSTLY COMMITTED TO THE STRONG DEFENSE OF OUR COUNTRY, SHOULD NOT BE FORCED TO SOLELY ACCEPT THE FINANCIAL BURDEN FOR THE PROTECTION OF ALL AMERICANS.

AS FOR THE CITY ITSELF, AND OUR LOCAL GOVERNMENT LOSSES, I MUST STATE THAT WE HAVE ALREADY BEEN DAMAGED BY PROBLEMS IN THE INSURANCE INDUSTRY AND HAVE NO INSURANCE. WE HAVE BUILT A SMALL SELF-INSURANCE FUND, IMPLEMENTED LOSS CONTRACT PROGRAMS, AND CREATED NEW SAFETY PROGRAMS. HOWEVER, OUR BEST PROGRAMS HAVE NOT PREVENTED US FROM SUFFERING $400,000 IN LOSSES TO CITY FACILITIES RESULTING FROM THE PEPCON EXPLOSION. YOU WILL ALSO BE RECEIVING FIGURES FROM OUR LOCAL HOSPITAL AND DAMAGE FIGURES FROM THE CLARK COUNTY SCHOOL DISTRICT FOR THE ELEVEN DAMAGED SCHOOLS FROM WHICH 13,000 YOUNG PEOPLE WERE EVACUATED DUE TO FEARS OF ADDITIONAL EXPLOSIONS AND TOXIC CLOUDS.

IN OUR OPINION, THE PAST CAN BE HEALED WITH HELP FROM THIS COMMITTEE. THE FUTURE ALSO REQUIRES HEALING. AS MENTIONED, OUR PEOPLE HERE GENERALLY WANT TO SUPPORT NATIONAL

DEFENSE. HOWEVER, MANY OF THEM THEY NOW LIVE IN DAILY FEAR. ONE SMALL NEIGHBORHOOD IN THIS CITY IS CALLED "HILLCREST". THIS NEIGHBORHOOD WAS EVACUATED IMMEDIATELY AFTER THE PEPCON BLAST. NEARLY EVERY HOME WAS DAMAGED. MANY OF THEIR JUNIOR HIGH SCHOOL AGE CHILDREN WATCHED THEIR LUNCHROOM CEILING BEAMS CRACK AND SAG, WINDOWS BLOW OUT, CEILINGS FALL, AND A TOXIC CLOUD RISE. THE REASON I MENTION THESE ITEMS IS TO POINT OUT THAT THE RECENTLY REOPENED KERR McGEE AMMONIUM PERCHLORATE PLANT IS A FULL MILE CLOSER TO THIS NEIGHBORHOOD THAN WAS THE PLANT THAT EXPLODED.

WE AS A CITY HAVE A DESIRE TO KEEP THE JOBS IN THE PEPCON AND KERR McGEE PLANT. WE WOULD WISH THAT PEPCON COULD BE BUILT IN A PROTECTED AREA FAR ENOUGH AWAY TO BE SAFE BUT NEAR ENOUGH TO HENDERSON TO ALLOW THE ALREADY SKILLED AND TRAINED PEOPLE TO BE ALLOWED TO COMMUTE. WE WOULD HOPE THAT ANY EXPANSION OF KERR McGEE WOULD FOLLOW THE SAME APPROACH, BUT THAT, IN ADDITION, THE PRESENT KERR McGEE PLANT WOULD BE MADE SAFE UNDER THE SUPERVISION OF LOCAL GOVERNMENTS AND APPROPRIATE STATE AND FEDERAL AGENCIES.

FURTHER, WE BELIEVE THAT THE ENTIRE CLARK COUNTY ISLAND WITHIN HENDERSON COULD BE ANNEXED TO HENDERSON. HOWEVER, THE POTENTIAL COSTS AND RISKS ARE MUCH TOO HIGH FOR THIS SMALL CITY TO RISK. WE WOULD HOPE THAT THE FEDERAL GOVERNMENT COULD COMPLETE ENVIRONMENTAL STUDIES OF LAND AND

GROUNDWATER THROUGHOUT THE AREA AND FURTHER, SHOULD CONTAMINATION BE FOUND, MOVE THE AREA TO THE TOP OF THE SUPERFUND LIST.

THANK YOU FOR YOUR TIME. I HOPE YOU HAVE QUESTIONS.

Mr. **Roe**. I thank the gentleman. Mr. Finney, do you have a statement you want to make?

Mr. **Finney**. No, Mr. Chairman, I do not. I am here to support the city and respond to questions.

Mr. **Roe**. Mr. Pappageorge?

STATEMENT OF JOHN PAPPAGEORGE, DEPUTY CHIEF, CLARK COUNTY FIRE DEPARTMENT, HENDERSON, NV

Mr. **Pappageorge**. Thank you, Mr. Chairman. Is my microphone on?

Mr. **Roe**. Yes, we can hear you.

Mr. **Pappageorge**. I appreciate the opportunity to appear before this committee. I am also going to represent Commissioner Woodbury as much as possible. He apologizes to you, Mr. Chairman, and to the distinguished members of the committee for not making it. He had other commitments and had late notice that he was asked to appear. So, I will try to represent him. And if I cannot answer the questions, we will try to get the answers for the committee.

In my capacity with Clark County, I am Deputy Fire Chief. I am not certain what you need from me, Mr. Chairman, or what type of statement you would want, but I am prepared to cover anything that does relate to the fire service or the emergency that day at PEPCON. If you have any questions or want a presentation from me, I will be glad to do that.

Mr. **Roe**. Mayor Kesterson?

STATEMENT OF MAYOR LAURA KESTERSON, HENDERSON, NV

Ms. **Kesterson**. I think that Gary has eloquently explained our position and, so, I am not going to bore you with going over those things again. I would like to say that my husband worked at PEPCON in the construction stages, after it was built, and in production, and at no time did we fear for his life. I do not think that anyone in Henderson had that fear.

Mr. **Roe**. At that time.

Ms. **Kesterson**. Right. I have been attending a Mayors' Conference in Salt Lake City and one of the symposiums that I went to was on how to react to a disaster in your community. One of the things that they told us was to get it over with, to take care of it, to get it over with. At this point, it has been impossible for us, as I am sure that you can see why it is, but the noise had kind of subsided after the PEPCON blast—until Kerr-McGee said they were going to reopen. And then the letters started pouring into my office.

There were letters on both sides: "Don't open the plant." "Open the plants. We have got to live."

And I think that right now there are two questions that the people of Henderson really need and I think, Mr. Roe, that you have addressed them very eloquently. It is disturbing that this incident has split our community. We need help at this time as the FEMA officials have expressed, as Gary has expressed. That is one of our problems. But I think the bigger problem is what is going to happen now. And that is the problem that we have to face as a community and I hope that we are going to face it as a unified community and as a unified community with the nation.

I think our thanks at this time goes to all of you for spending your time here with us and trying to help us. It has been my impressions that every one of you have had our interest at heart. We appreciate that very much. It reconfirms our faith in government.

I would ask that these few things be addressed and that is: What can we do to help our people at this time with their financial problems? A lot of them have health problems and to help us with what happens now at the plant. Thank you.

Mr. ROE. Well, I thank the Mayor very much and all of you for your testimony. I think we could benefit from additional observations from Mr. Pappageorge in reference to the safety issues, particularly at Kerr-McGee, and the investigation at the PEPCON. I do not want to lose the continuity, however.

When you speak basically of a community divided—sometimes disasters divide a community and sometimes disasters put a community back together again. We are trying to sift out what we can or cannot do or what we should or should not do to be of help to the people, as you can obviously see.

Having said that, and to deal with the first item, such as FEMA, while we are here. The allegations and however we are sampling this—let me say this to you. I have served as mayor of my community. I have been the director of the county government. I have served as the Commissioner of Environmental Protection in the State of New Jersey. I have been in Congress for 19 years; so I do not come to the table without some experience and some understanding of these issues. I think that Mr. Peterson and I, on that basis, can understand that relationship.

However, it seems to me to be basic as citizens talking together that there is a disagreement as to the quantitative amount of the damages done versus the point of what can be ascertained by FEMA and how we can do this under the law to try to achieve this goal.

Now, maybe I am a country boy. I have to go and feel and touch something. The reason we came to Nevada and we went to the plant and looked at the PEPCON plant, literally down there on the ground, we wanted to see. You cannot see that from Washington, you have to be here.

Okay. I think that when we looked at the Kerr-McGee plant, we went over there and we felt and we touched and we went through that. We put on our booties and our felt hats and we went into the plant. We just did not sit in the bus and look at it. We went to see. And that is what we did when we visited the hospital, the same way.

Now, we have got to take that together, we have got to say to the good city here and the citizens of this city that there is no point in us being divided because division is not going—a house divided is not going to stand. That is not going to come together. So, the first thing we ought to be talking about is getting our act together—but getting our act together in what direction? We do not want the plant; we do want the plant. We need the jobs; we do not want the jobs. So, even Solomon is not going to solve that problem.

But what is fair, and what can we do to help people become whole? And that is what we are trying to do. That gets to the FEMA issue. And the FEMA issue, we say, "Well, FEMA has a particular process." And they have made a very telling point in my judgment and in fair play.

They have come back and said, "Well, if you tell us, we will try to correct it. But somebody has got to tell us what you want us to do." And I think that is what I heard and I think that is what everybody heard.

"Well, they did not listen to me. They did not come over to my house."

That is not so. And we cannot do it by samples. And then you make the point—and forgive me if I am being pedantic, I do not mean to be. You make the point you only have six or seven people in your building department. I respect that. I go to a lot of small towns and they have two people in their building department. But I also have a county. And I say to the county, "Hey, guys, you know you have got a cookie in the middle of my town. I do not know where those tax ratables are going."—or whatever that means. "But should we not be working together?"

I think you said that, Mr. Bloomquist. The county is trying to help. Does the county have some people they could bring in to help with the investigation of where the houses may need them? Does the state have that help?

Surely, in this great state there ought to be some people that could come in and help on the city side to put the data together that we need.

Mr. BLOOMQUIST. Yes, sir.

Mr. ROE. We are charging down on FEMA and trying not to be personal. We are saying, "Are you using all the resources you have?"

Now, we have listened to Mr. Peterson and his associates and they said, "Tell us what you want to see and go and give us a list. We will go look at it." Not a sampling, not an arithmetical sampling. I want a list. I want to go to Mary's house and Paul's house. I want to see what the damage is done. How do we identify that? That is one point.

The next point I would come back and I would say to myself, "Well, if somebody is going to be doing some repair or improvement, they have to get a building permit." And I think you said that there was a question of 350 building permits involved recently, at roughly about $8 million. Did I get that correct?

Mr. BLOOMQUIST. Yes, sir.

Mr. ROE. Now, it seems to me that if I were going to be communicating with FEMA, I would say to FEMA, "Well, we have given you a list. Here are our requests for building permits. Of the 350, there is 322 here that are related to this house, this block; this house, that block; this house, that block. We are going to issue those permits. So, we know the quantitative amount of damage, at least in part, that they have listed in the building permit."

Is that not a reasonable point to make?

Mr. BLOOMQUIST. It certainly is.

Mr. ROE. Is that given to FEMA? Has FEMA been reviewing that with you? Is that part of the list?

Mr. BLOOMQUIST. That is part—exactly part of what needs to be accomplished. And that is one of the points that I wanted to make. When the first request went back, it showed $3 million of uninsured damage. The next report was $17 million. And now, I am in front of you today, almost cringing, saying $20 million.

Mr. ROE. I understand.

Mr. BLOOMQUIST. We gave you a report of $20,660 or—it was in the last report per damaged unit in the area.

Mr. ROE. If the gentleman would yield, you have given that on—and I do not mean this unkindly—you are giving on a statistical basis.

See, I am an American citizen. If somebody damages my house and breaks my windows and blows down my garage door, I am going to go to the official and say to him, "I am being hurt." Now, I am the citizen. Where do I go? I would come to the town hall. That would be the first thing I would do because they would be my people, my councilmen and women whom I helped to elect. And I would say, "Councilwoman Joan, I am in your district. Here is the damage I got done." Who do I go to? I do not think we can handle it statistically, on the basis of a drawn out arithmetical progression. Do you understand what I am trying to say?

Now, if the city is small enough, can we not have the people that would come into the city hall and say, "Mayor and Mr. Bloomquist, here is my problem." Have we set up such a facility for them to do that?

Mr. BLOOMQUIST. We not only have done that. If we had a chance, we could take you into the office that has been handling it. We have over 2,000 of those that we have dealt with. And we have been receiving those things and we have been dealing with them.

Mr. ROE. Now, can the gentleman yield. And I am not being critical. Has that data been translated over to the people from FEMA? Is FEMA privy to all that information?

Mr. BLOOMQUIST. They are as of very recently and mostly yesterday.

Mr. ROE. All right. That is okay.

Mr. BLOOMQUIST. Yes, very new. It is very new information. That is the point I wanted to make. The number has been changing so quickly.

Mr. ROE. But that is what the appeal is about.

Mr. BLOOMQUIST. Yes.

Mr. ROE. Okay, the appeal the Governor has made is based on new information which you are developing. Is that a fair commentary?

Mr. BLOOMQUIST. That is correct.

Mr. ROE. Does FEMA feel that you have the communion between the government, now—the city government getting the information to you of everything that is available? So, did FEMA not testify and say—and correct me if I am right or wrong: "If the city tells us and lists what we want, we will go look at every single one of them while we have every person here to do it." Are we doing that? Does the city feel that that is being accomplished at this moment?

Mr. BLOOMQUIST. I think after yesterday's meeting with FEMA, things are going better than they were previously.

Mr. ROE. Okay. So, therefore, if they are going better—what do you think that we may be able to do, all of us together, including FEMA and ourselves, to make it go better? Is there some link there that we could be doing a better job on it?

Mr. BLOOMQUIST. If I might, I will mention the first question that I asked the FEMA delegation when they arrived yesterday is: "Did you bring structural engineers with you? If you did not, we will hire structural engineers to go with you if that is what it takes." And in this particular case, they brought structural engineers.

Mr. ROE. Good.

Mr. BLOOMQUIST. It is impossible to survey the damage here without structural engineers.

Mr. ROE. Okay. So, we have got structural engineers. Are they effectively being used?

Mr. BLOOMQUIST. I have no idea. They have been working since yesterday and they are out there working today.

Mr. ROE. Who is coordinating for the city, then?

Mr. BLOOMQUIST. That is Jack and Joe Titus in the back of the room.

Mr. ROE. Jack and what?

Mr. BLOOMQUIST. Jack Finney.[86]

Mr. ROE. Okay. And Joe Titus? [87] Where is Mr. Titus?

Mr. BLOOMQUIST. Is Joe still there?

Mr. ROE. Tell him to get in here.

Mr. BLOOMQUIST. Mr. Chairman, while we are waiting, I would also like to mention from the standpoint of this city—and the discussions that have been going on in this city on a rather steady basis—what is really coming to us from the public: they do not care if it is FEMA or not. We keep discussing FEMA. It is irrelevant. It is the Federal Government that we are dealing with.

Mr. ROE. The gentleman from New Jersey thoroughly understands that. But the same thing: The Good Lord helps those that help themselves. I have been taught that in my younger day. So, it seems to me there is a certain latitude that FEMA has under the law. And we have to respect that. And we have got to be able to say that all that FEMA is capable of doing under the law or eligible of doing under the law, they are doing. And if we are satisfied that that is the case and they are getting the information received properly from the community, then we can start dealing with that part that is not covered under the law, which perhaps I was a little loquacious on earlier when the Admiral and the others testified. But we have to settle the issue, as far as the city is concerned and as far as the representatives from FEMA, that you are giving them all the information you have and they are doing all they can with that information. That is the key point.

Mr. BLOOMQUIST. We will know that by the end of the day. Unfortunately, we do not know it at this moment.

Mr. ROE. That may not be able to solve all the problems, but it is certainly going to winnow down part of what the exposure is. Is that reasonable?

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[86] Jack Finney, Emergency Management Coordinator, City of Henderson, Nevada.

[87] Joe C. Titus, Superintendent, Building and Safety Division, Development Services, City of Henderson, Nevada.

Mr. **Bloomquist**. I think we will get closer.

Mr. **Roe**. Okay, the gentleman from California?

Mr. **Bloomquist**. By the way, if I might, Mr. Chairman, Bob Grant has welcomed the people from Missouri. So, I think it is my privilege to welcome the Congressman from Wisconsin.

Mr. **Konnyu**. This is now the Congressman from California.

Mr. **Bloomquist**. Where did the Congressman go from Wisconsin?

Mr. **Roe**. He had to leave. Go ahead.

Mr. **Konnyu**. Mr. Bloomquist, a series of questions. Has the cause of the explosion been determined?

Mr. **Bloomquist**. No, sir.

Mr. **Konnyu**. Has sabotage been ruled out?

Mr. **Bloomquist**. I am not involved in answering those questions. Mr. Pappageorge might be able to.

Mr. **Roe**. I would not take that question——

Mr. **Bloomquist**. I was not going to, Mr. Chairman.

Mr. **Konnyu**. Does it appear that any safety regulations were violated that caused or were the immediate cause of the explosion?

Mr. **Bloomquist**. If I may, Mr. Chairman, may I make a statement regarding the investigation?

Mr. **Roe**. Yes, you can.

Mr. **Bloomquist**. We have been involved in the investigation since May 4th and are near a conclusion. We have not concluded anything final, yet. We are hoping——

Mr. **Konnyu**. That is why I asked—pardon me. I used the word "appear."

Mr. **Bloomquist**. Certainly. We hope to have conclusions within a week. We are waiting for laboratory tests to come back to either disprove or prove our conclusions, which certainly are not concluded yet.

What we hope to get out of the final evaluation of what we think occurred is what to do about preventing something like this happening again. We are not looking to blame anybody for anything that may have happened.

However, if I were to say what caused the fire today, next week, I may be wrong. However, we would certainly want to—and if this committee wanted us to come before them again with our conclusions, we certainly would want to do that. We would be happy to do that and we would cooperate any way possible. However, because we have not concluded anything, yet, I do not think I can really say much about it.

Mr. **Konnyu**. Would you, Mr. Pappageorge, through your appropriate channels, submit to this committee the conclusions so that it can be made part of the record of this hearing—obviously with the concurrence of the Chairman and the other members present.

Mr. **Pappageorge**. Absolutely.[88]

Mr. **Roe**. No objections.

Mr. **Konnyu**. Now, going from the past to the future, and preventing reoccurrence, are you and other local officials satisfied with the agreement reached with Kerr-McGee concerning storage of this product, from the county's perspective, and then I presume, Mr. Bloomquist, for the city perspective;

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[88] See Appendix II-4.

Mr. PAPPAGEORGE. First, if I may, I was not a party to that meeting; however, we have Assistant Chief Jim Barrett here in the room if you would like for him to come forward. As I understand it, the negotiations went well. We are satisfied, but he could elaborate on that if you would like.

Mr. KONNYU. Is he in the room?

Mr. ROE. This is the Chief or the Deputy Chief?

Mr. PAPPAGEORGE. I am the Deputy Chief. He is the Assistant Fire Chief in charge of the Fire Prevention Bureau that did meet with Kerr-McGee officials.

Mr. KONNYU. The reason I bring up the question, sir, is you might have read Mr. Greenspun's column [89] that feels that there has been a sell-out with respect to Kerr-McGee and I am just curious as to whether you feel the same way.

Mr. BARRETT. No, sir. I attended those meetings and I do not feel that it was a sell-out. We had several meetings and several inspections by members of my staff in the Fire Prevention Bureau. We came up with some conclusions and Kerr-McGee came back with other conclusions on how material should be stored.

We met a median on that.

Mr. ROE. I do not want to break your trend of thought, but would the gentleman identify himself for the record, please?

Mr. BARRETT. Oh, I am sorry. I am Assistant Chief James Barrett with the Clark County Fire Department.

Mr. ROE. Would the gentleman proceed?

Mr. BARRETT. Thank you. We met and came up with a conclusion on how the materials should be stored, which was different than that of the inspection team. We negotiated. We now have farther distances between the piles and which they refer to in various codes as interlying distances. We feel that it is going to be stored in a safe manner. For me to sit here and say as a fire expert that I could predict whether we are going to have another type of explosion of this nature, I cannot, even with those safeguards built in.

Mr. KONNYU. So, it looks positive to you. Is that correct?

Mr. BARRETT. I believe that Kerr-McGee is making every effort to follow our recommendations and requirements as we placed upon them based on the nationally recognized standards and local ordinances of Nevada revised statutes.

Mr. KONNYU. Okay, Mr. Bloomquist, have you or your office or representatives of your office participated with the county in those negotiations and, if so, what are your conclusions?

Mr. BLOOMQUIST. They have been providing us with information and may have the opportunity to participate with them. We think they have done a very fine job in bringing Kerr-McGee back into line and making it possible for them to produce.

There are certain things that I think, and the county can correct me if I am wrong, that they could not get corrected immediately. And that is the full separation of the materials. I am advised by the county they are moving in the direction of full separation of the materials and reduction of the inventory on site.

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[89] Mr. Konnyu apparently refers to Mr. Brian Greenspun's "Where I Stand" column in the Las Vegas *Sun*, 19 June 1988, page 1A.

Mr. **Konnyu**. How long will that take to get full——

Mr. **Bloomquist**. I think that was one of the key issues and I would prefer the county answer that.

Mr. **Barrett**. Kerr-McGee may have to correct me, but I believe they intend to meet our requirements totally by the end of the year. And this is, as testimony was presented earlier, on reducing the stockpiles and that is how this is going to be accomplished, due to the land usage that they have.

However, they did immediately make changes in developing new pads and storage location which did not meet our ultimate criteria, which they are now in the process of doing.

Mr. **Konnyu**. All right. Now let me go to yet another area which is the new plant site. Is anyone at that table participating with PEPCON on a possible new plant site? Or is that not part of your direct activities of the moment?

Mr. **Bloomquist**. We are not, as a city; that is probably not in our purview. About all we could comment on, as was mentioned earlier, 87 percent of the land in this state is Federal. It would be our request as a city that they be within a reasonable commuting distance, but far enough away to be safe and in the center of a large enough Federal parcel to be able to protect the area.

Mr. **Konnyu**. Has your city adopted a resolution to that effect?

Mr. **Bloomquist**. We have not, but we certainly could easily enough.

Mr. **Konnyu**. When you said far away, does that mean far enough away that it be outside the borders of the city but yet the people who live here could drive there? Is that what you meant?

Mr. **Bloomquist**. Yes. In fact, it could not be located within the borders of the city. That would be impossible and still create confidence within the community.

Mr. **Konnyu**. What procedures have you devised to make sure that Kerr-McGee is complying with the local regulations?

Mr. **Bloomquist**. We are continuing on to inspect and reinspect the facility and we will continue to do so as time goes by. They are attempting to come into compliance with our latest report. And this will be an ongoing inspection procedure. The number of inspections that will be conducted a year have not at this time been determined. We were out there constantly during the last month, insuring that our violations, if you may, or discrepancies, have been corrected.

Mr. **Konnyu**. Are you in planning, or any inspections you currently are making, are you making announcements on the results of each inspection so that the public, which, obviously, from all we have heard just simply does not have 100 percent confidence in the operation, can develop that confidence through the results of your inspection findings?

Mr. **Bloomquist**. Only via the news media, sir, are those announcements being made. They are public record. No, we are not making announcements per se to the public.

Mr. **Konnyu**. You do not cut a specific news release stating the results after each individual inspection? And since you are not, would you consider that?

Mr. **Bloomquist**. Yes, we would consider that without any difficulty whatsoever. It is not a problem for us to contact our public information and do a press release so that the community would be advised of what we are accomplishing and what has been accomplished at the facility.

Mr. **Konnyu**. Having been a state legislator in Sacramento for six years, and having a nuclear plant there where we were having some problems,[90] that that nuclear plant, the way they tried to develop confidence is, among other things, that each inspection result was publicly announced so the public would know, "Hey, things are back on target again." And I think that is very important.

Thank you, Mr. Chairman.

Mr. **Roe**. I thank the gentleman from California. The Chair defers to the gentleman from Missouri, Mr. Volkmer.

Mr. **Volkmer**. Thank you very much, Mr. Chairman. I would first like to ask Mr. Pappageorge, or the other gentleman with him, if they have any knowledge—the fire was on May the 4th. May the 5th, 6th, somewhere in there, your state court issues an injunction stopping any further investigation. True or false?

Mr. **Pappageorge**. There were several injunctions that did slow up the investigation. I do not recall it was that soon. I could get those dates for you.

Mr. **Volkmer**. Well, who—if you know or if you can find out for me—who was the first instigator of the first case that slowed you all down from investigation.

Mr. **Pappageorge**. Pardon me for looking behind me. I was looking for Captain James, who was our lead investigator on that.

Mr. **Volkmer**. Here he is.

Mr. **Roe**. Will the gentleman state his name for the record, please?

Mr. **James**. Captain Robert James, Clark County Fire Department.

I contacted the District Attorney's Office this morning per your request yesterday. They indicated to me that those temporary restraining orders were issued and initiated by Barker, Gillock, a firm representing PEPCON, and they were followed by others, such as Doche and so forth, in concurrence with that. But they were initiated by that group.

Mr. **Volkmer**. But PEPCON was the initiator of the first?

Mr. **James**. That's what the District Attorney's Office told me, yes, sir.

Mr. **Volkmer**. And do you have the date of that?

Mr. **James**. Not with me. No, I sure do not.

Mr. **Volkmer**. Well, that could be ascertained.[91]

Now, I want to go to Mr. Bloomquist for a few questions, if I may. In your statement on page 3, you have pointed out, "Through no fault of their own, people here are being forced to pay out an additional $3,133,000 for insurance deductibles."

Mr. **Bloomquist**. Yes, sir.

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[90] Mr. Konnyu apparently refers to the Diablo Canyon nuclear power plant in San Luis Obispo, California.

[91] The temporary restraining order was filed in the District Court of Clark County, Nevada, on May 5, 1988.

Mr. VOLKMER. Would you explain that to me?

Mr. BLOOMQUIST. Yes. What we mean by this one is that they are paying their insurance deductibles and I think that follows on an earlier statement that this was not a natural disaster.

Mr. VOLKMER. In other words, those are not additional deductibles——

Mr. BLOOMQUIST. No, they are not additional deductibles.

Mr. VOLKMER. Those are the deductibles that you feel should be included in the FEMA program.

Mr. BLOOMQUIST. Yes, sir. We think they should.

Mr. VOLKMER. I just wanted to clarify that so I know what you mean. Now, on the same page, further down, you say in the second to the last paragraph, "However, our best programs would not prevent suffering $400,000 in losses to city facilities resulting from the PEPCON explosion."

Mr. BLOOMQUIST. Yes, sir.

Mr. VOLKMER. Does FEMA agree with you that you have got $400,000 in losses?

Mr. BLOOMQUIST. From reading their report, I do not think they do. But I think by the time they are here this weekend, they will agree—or should agree.

Mr. VOLKMER. Well, let me ask you this. Have you discussed it with them?

Mr. BLOOMQUIST. Recently?

Mr. VOLKMER. Any time.

Mr. BLOOMQUIST. Not since yesterday.

Mr. VOLKMER. Yesterday, did you discuss this $400,000 figure?

Mr. BLOOMQUIST. Yes.

Mr. VOLKMER. What did they say?

Mr. BLOOMQUIST. That is why they are here. After we finished our meeting, they left and decided to go out and do more field inspections, which I believe——

Mr. VOLKMER. They took your figure down?

Mr. BLOOMQUIST. Yes. And my comments. They have my comments as well.

Mr. VOLKMER. Because the reason I ask that is because earlier, if you remember their testimony just here today, they said the total amount from this from public buildings is $400,000.

Mr. BLOOMQUIST. That is impossible.

Mr. VOLKMER. And that included $250,000 from the school deductible. That only leaves $150,000. They did not have that $400,000——

Mr. BLOOMQUIST. That is why we are very pleased that the Governor made his request or appeal to the prior FEMA decision so that they could come back and get the real numbers the way the real numbers are.

Mr. VOLKMER. Well, somebody—Mr. Chairman, later on, I would like to call Mr. Peterson and Mr. Kwiatkowski back and see if they can answer this question. It is simple arithmetic to me. And somebody cannot add up or else you did not have $400,000 worth of damages.

Mr. BLOOMQUIST. I can assure you, there is no exaggerations in those figures at all. And they may go higher. By the time we finish our structural inspection on the Gibson Road, and the fire facility down in the center of town, approximately a mile from the blast site, it may end up being substantially higher.

Mr. ROE. Is FEMA participating in that review?

Mr. BLOOMQUIST. Yes.

Mr. VOLKMER. And then you also say what I think is very important, because it goes into the questions I have had with FEMA earlier today. On page 2 of your statement, you come up with a total of that $20,149,000 uninsured loss.

Mr. BLOOMQUIST. Yes, sir.

Mr. VOLKMER. Have you conveyed this information that went into that to the FEMA people?

Mr. BLOOMQUIST. As of yesterday, yes, sir.

Mr. VOLKMER. You did convey that yesterday.

Mr. BLOOMQUIST. The prior week, last week, when the Governor——

Mr. VOLKMER. Undoubtedly, they have not had time to review it because today they said that they would work with you on anything or something to that effect——

Mr. BLOOMQUIST. We gave them that information yesterday morning at approximately 10 a.m.

Mr. VOLKMER. You gave it to them yesterday at 10 a.m. and your basis says that you have a 5 percent sampling; 7.5 percent damage totally without insurance, extrapolation of 8,845 damaged units to the—county-wide, insured damage units of 13,000. Shows 975 total uninsured damaged units multiplied by the $20,000 for damaged units.

Mr. BLOOMQUIST. Yes, sir.

Mr. VOLKMER. Now, there is a lot of discrepancy in here, in what you are saying, than what FEMA has been saying.

Mr. BLOOMQUIST. That is correct. I believe my numbers are more accurate than theirs. And we are willing to work together to make those numbers even more accurate. One of the things we discussed yesterday morning is this, is our sampling. What sampling would make FEMA comfortable? And if it turns out it has to be a 100 percent sample, then we estimated a total of 4,000 to 8,000 labor hours to do that sampling and it depends on what examining you want done.

Mr. VOLKMER. They want you to do it?

Mr. BLOOMQUIST. Yes.

Mr. VOLKMER. They want you to provide the manpower to go out and interview these people.

Mr. BLOOMQUIST. If they want realistic sampling——

Mr. ROE. Would the gentleman yield?

Mr. BLOOMQUIST [continuing]. We would, on behalf of the people here, do it.

Mr. ROE. I think you are right on target. That is not what FEMA said. Now, I heard FEMA testify, unless we misunderstood—if the gentleman would yield—FEMA said whatever we can do to work to solve the problem, that is what we are willing to do. Now, you are making a very telling point at the moment. If it becomes necessary to make 100 percent sampling, then that is what we have got to do to solve the problem. Do you understand where I am coming from?

Mr. BLOOMQUIST. Yes, sir.

Mr. **Roe**. And I understand from talking with FEMA that if we give them the information, work with them, together we will solve it. I mean am I missing something here? Are we all missing something?

Mr. **Bloomquist**. No, sir, but I would certainly hope that we would get some financial relief in this city from the beginning if we have to go 100 percent.

Mr. **Roe**. Wait, wait. Just a minute. Whether we like it or not or whether you like it, with the greatest respect, unless we can put it together and we have the meat to go to the marketplace with, we cannot solve the problem. Discussion is not going to do it. We have got to nail down the figures. That is what the gentleman is saying, Mike. Is that correct?

Mr. **Volkmer**. That is what I am trying to get figured out. And I hear FEMA saying that they are working with you and they are getting their figures—their figures do not agree with yours at all. I read Mr. Peterson's statement and I read your statement, and they are two different things.

Mr. **Bloomquist**. Yes, sir. They are.

Mr. **Volkmer**. Completely two different.

Mr. **Roe**. When are the statements written, however? Were they written three days ago or four days ago? Are you getting closer together, now?

Mr. **Bloomquist**. Mine was written yesterday.

Mr. **Roe**. Well, are we getting closer together, do you think?

Mr. **Bloomquist**. I do not know. I would say that our figures are getting closer to accurate all the time. I would say that the FEMA figures are not as accurate as mine. I think that FEMA has not been as close to it as we—as the staff have been, because they were here for two days, once, a day and a half another time, and now they are back again. It is an ongoing——

Mr. **Roe**. They have a top drawer team here and they say they would stay here until you got the figures.

Mr. **Bloomquist**. And that is one of the most pleasant things I have heard here today.

Mr. **Roe**. The gentleman from Missouri.

Mr. **Volkmer**. Well, I would just like to have you all play with the same rules, you and FEMA. Now, in this $20 million figure, you have private property, all damaged private property.

Mr. **Bloomquist**. Yes, sir.

Mr. **Volkmer**. And included in that is the deductibles?

Mr. **Bloomquist**. No, sir. The deductible is outside of that.

Mr. **Volkmer**. This $20 million does not include the deductibles?

Mr. **Bloomquist**. It does not include the deductibles.

Mr. **Volkmer**. That $3 million figure you gave me before.

Mr. **Bloomquist**. That is correct.

Mr. **Volkmer**. It is not included. I want to make that clear because FEMA is not going to include it.

Mr. **Bloomquist**. We could discuss that issue as to whether or not they should.

Mr. **Volkmer**. No. I want to try and get—everybody wants the same type of figures to come to a conclusion. FEMA is not going to, you are not including them either. Correct? In the $20 million figure?

Mr. BLOOMQUIST. If we were to submit the figure, today, I think that would be close to irresponsible. I was asked to provide a number that is believed to be the most accurate number. This is not like submitting for a grant. This thing is shifting.

Like I mentioned, the average loss of $20,666 from our sampling—and yet from actual permits issued, it is different than that. That is why we asked FEMA yesterday what is a reasonable sample?

There is this old expression that says, "Is the catch worth the chase?"

If you are going to do at an average hourly time of 4 to 8 hours per building to do structural surveys, at the cost of doing structural surveys, you may not want to do 100 percent. You may be a lot more pleased of just spending the money to do a reasonable sampling and accept the fact that you are going to live with that sampling. It would be no different, in my opinion, than when we design an engineering project to put a water pipe in. We do test borings, we do not dig the ditch to begin with. There has got to be something reasonable. And we would accept something reasonable. If it is not reasonable, we have to ask for assistance.

Mr. ROE. Would the gentleman yield?

Mr. VOLKMER. Yes, I yield.

Mr. ROE. Am I losing something? We all have had governmental experience. We have all had contractual experience and so forth and so on. Now, I am not going to give you a check—let me tell you something: I am just not going to give you a check unless the damage is there.

Somebody has got to in this whole array, the citizen has to come aboard and say, "This is my house. I am not being pedantic. I have four windows knocked out, a garage floor and I lost a ceiling. I went out, I got three bids. The guy told it is going to cost me $396 to fix it. That is what I need." Now, I have an eligible application. FEMA cannot come and make a commitment, nor can anybody else, on the basis of statistics. You have got to have an application from the person who has been aggrieved, where the damage has been done. Am I missing something?

Mr. BLOOMQUIST. Sir, you are absolutely right. We totally agree with that. We were asked to provide a damage estimate. We said it is a plus or a minus. Our feeling is that when we start talking about things like insurance percentages, it is probably an irrelevancy.

In our opinion, 900 to 1,000 homes, somewhere in that range had no insurance and were severely impacted. We think they should be taken care of. Why the ratio applies, why Green Valley, with its heavy insurance——

Mr. ROE. Well, do not get me complicated. I am a simple guy from New Jersey. Make it very simple for me.

Mr. BLOOMQUIST. I do not believe that.

Mr. ROE. Therefore, one comes back and says, "Well, if FEMA is not going to inspect each and every single one of the 80,000 houses to be sure, then they are using a sample."

You are saying, "Well, we in the city cannot inspect each one. We could do it. It will take us six months to do it. We could do it. But we are going to do a sampling." And between the two agencies, either FEMA and yourself, some decision would have to be arrived at, I would assume, on direct and statistical relationships to determine whether it was eligibility for a declaration or not. Is that what we are really saying?

Mr. Peterson, is that what we are saying, basically?

Mr. PETERSON. We have to come to some kind of confidence in your statistics.

Mr. ROE. That is what I am saying.

Mr. PETERSON. Yes, sir. And that does not mean, in my opinion, that you have to do 100 percent, but you do have to have some degree of confidence—and that means when you do your sampling, you have your professional outside engineers in there. It does not mean the city's professionals. And they do their evaluation and start coming up with the consistency.

Mr. ROE. But I am just trying to say this one point. At least we are getting to understand what the parameters the debate is about. Is that reasonable?

VOICE: We are not getting it on the mike.

Mr. ROE. I understand. We are not getting it on the microphone. I am aware of that. I have ears, I can hear.

Would you mind repeating that on the microphone for us so we can get it on the record. I will restate the question and then we can get it on the record.

What the Chair is attempting to do, which I think should be obvious to everybody in this room, is to try to bring at least an understanding of what Mr. Peterson in his responsibility of—what the FEMA organization is responsible to do. And Mr. Bloomquist, who represents the community as the City Manager, as to what he sees his responsibility to be and how do we get the two together so we are pulling from the same deck, is where I am coming from.

And it seems to me there has been some disagreement as to the quantitative analysis of damage that has or has not been done, based on two observations: one, where both FEMA and the City have been doing some direct investigation on particular individual cases and have been extrapolating that data over a period of what the total universe of damage may or may not be. And that I think sets the stage.

What we are trying to do is to bring the two groups together so we are dealing with the same approach. And as I understand what Mr. Peterson said, someplace along the line, we will try to work with the city to determine what part we think we can do; that the city is accurate and, I would assume, Mr. Bloomquist, with several reasons—whether we agree or not agree, someplace we have got to bring those two points together. Is that correct?

Mr. BLOOMQUIST. Yes, sir.

Mr. ROE. Now, the Chair would like to ask the distinguished representative from FEMA—is that your understanding that that is what we are trying to achieve as best we can?

Mr. PETERSON. I think in general terms I would agree with that, sir. We have received a lot of new information from the city in the last day. We are dealing—we will deal with all of that information and there comes a point in time where you should be able to arrive at a statistical confidence that you have adequately surveyed all of the information that the city has given and identified that they want us to look to and additional samples. There comes a point in time when your professional engineers that we have brought on board—who are neither FEMA nor the City, but professionals and stand on their own professional rights—say, "We have confidence that we have a statistical validity in what is going on here." And I think we will arrive at that.

Mr. ROE. For the record, does FEMA and does Mr. Bloomquist, representing the city, believe that the process is coming closer together now? The process? I am not talking about the figures. The process. Are we working closer together to arrive at some decision?

Mr. BLOOMQUIST. Sir, as of yesterday's meeting, I believe, yes.

Mr. ROE. Well, I mean are we or are we not?

Mr. BLOOMQUIST. Yes, we are.

Mr. ROE. All right. That's important. Does the city feel comfortable that you are getting the attention from FEMA that they feel they need at this point with the expertise that FEMA has brought into——

Mr. BLOOMQUIST. Yes. As I mentioned earlier, when they mentioned they brought structural people with them this time, we were more than pleased.

Mr. ROE. Does FEMA feel they are starting to get the information they think is needed from the city?

Mr. PETERSON. The city has provided us additional information in the last day. We are looking at that.

Mr. ROE. So, the process is now beginning to work.

Mr. PETERSON. I hope that the city knows that it is our intent to accept whatever the city gives us so that we can provide that to our experts, FEMA experts. We have got engineers around here, too, plus the independent experts. And we want to evaluate every piece of information the city wants to give us. I think we made that clear.

Mr. ROE. The gentleman from Missouri? Any further questions?

Mr. VOLKMER. I have no further questions of Mr. Peterson, but I would like for my firefighter to get back up there so I can clear something for the record.

Mr. PETERSON. I will clear a seat, sir.

Mr. ROE. Stay here, Mr. Peterson, please.

Mr. VOLKMER. No, no. This is going to be a very simple question. I want something for the record. I just need the name of the attorney, circuit attorney, or whoever it was that informed you about the lawsuit filed by PEPCON. I want the name of the attorney that told you.

Mr. JAMES. Oh, that was Mary Anne Miller of the District Attorney's Office.

Mr. VOLKMER. Mary Anne?

Mr. JAMES. Miller.

Mr. VOLKMER. Is that M-a-r-y A-n-n.

Mr. JAMES. M-a-r-y A-n-n-e.

Mr. VOLKMER. A-n-n-e, M-i-l-l-e-r, Miller?

Mr. JAMES. Yes, sir.

Mr. VOLKMER. All right. From your District Attorney's Office.

Mr. JAMES. That is correct.

Mr. VOLKMER. Clark County District Attorney's Office.

Mr. JAMES. Yes, sir.

Mr. **Volkmer**. That is all I need.

Mr. **Roe**. The Chair recognizes Mr. Bilbray.

Mr. **Bilbray**. Yes, I have a couple of questions. Mr. Peterson, I would like him to come back up. What I wanted to know was how long a process are we talking about right now? In other words, the city is trying to make available as much information as they possibly can. The Chairman has made it very clear, and I think all of us agree, that more information needs to be supplied to you to come up with accurate figures. Are we on a 48-hour deadline, a 7-day deadline, a 30-day deadline? What kind of a deadline are we on for the city, the county and the state to get together and give you the necessary information to reach what we consider a satisfactory conclusion?

Mr. **Peterson**. I would respond to you and I want to respond with a high degree of respect. We get criticized when we start taking a little bit of time because we want to have the information available as soon as possible.

However, it is my position that we have come back here on an appeal that I believe has been given, requested of us with utmost sincerity from the governor of this state. We have asked the city to provide us with information they have and it is incumbent upon us to take the time to review that information and try to come to a statistical bottom line of credibility here. And I am not willing, at this point in time, sir, to put a time limit on that.

Mr. **Bilbray**. So that what it is, it is kind of open ended at this point. The fact of getting information within reason.

Mr. **Peterson**. I think there is timely responsibility here on the part of all parties. And I think they all understand that. I am not talking about a six-month process here.

Mr. **Bilbray**. I understand that, Mr. Peterson.

Now, I wanted to ask Mr. Pappageorge——

Mr. **Roe**. Let the Chair interrupt the gentleman from Nevada.

Mr. **Bilbray**. Yes.

Mr. **Roe**. The Chair feels that we started out this morning, and the Mayor testified well an hour ago. Maybe you had a little town divided, but I would think we are getting very, very close together in a meeting of the minds in the process. And 99 percent of these things we achieve is not achieved in detail. It is achieved in how we handle the process.

Mr. **Bilbray**. That is what I was getting at, Mr. Chairman. I wanted to get to the county and the city right now. Commissioner Woodbury is not here and I would like to have him answer a couple of questions. I hope John can answer the questions.

First, is the county willing to supply additional people to help the City of Henderson to be able to go out and do this kind of detailed information because it means—it seems like a massive effort of both the building departments, the engineering departments, maybe even the County Assessor's Office, because they are certainly trained to be able to at least give assessments of the value of property. Can the county commit in this next week to a full commitment to help the City of Henderson to ascertain and pull this information together? Because, as they stated, they do not have the manpower. You are much larger. Maybe we can even get the City of Las Vegas involved and they have extra people that can help.

Mr. **Pappageorge**. Certainly, Mr. Bilbray, as you know, I am not authorized to approve that, but based on what has happened to date, I would have to assume we would help. We have provided two building inspectors already, 8 hours a day for several weeks to the City of Henderson. Based on that track record, I would assume it is the County's intent to help wherever and as much as possible.

Mr. **Bilbray**. I think it is going to be a lot more than two people, though. You are talking about 8 or 9,000 homes, probably 500 to 1,000 businesses. Each one has to be gone into, from the conclusion I have heard. And it has to be ascertained, the exact value, not theoretically that there is 10 percent out there and then we will add that by 9 and so forth.

Mr. **Roe**. If the gentleman would yield. I think we may have a misunderstanding. We have developed a process, now, which the interpretation of the Chair's point of view is that both FEMA and the city are comfortable with. And we are starting to bring that closer together. I do not believe that our intent is to have to do all 8,000. We are trying to develop a satisfactory, credible statistical approach. Is that not the understanding from both the city and from——

Mr. **Bilbray**. Is that the understanding of FEMA? I did not understand that.

Mr. **Roe**. Yes, that is the understanding. Is that correct?

Mr. **Peterson**. I would agree with that in context, but at the very least, we want to ensure that we have viewed every home——

Mr. **Roe**. I totally agree with that.

Mr. **Peterson** [continuing]. That has been reported to the city.

Mr. **Roe**. Totally agree.

Mr. **Peterson**. And that has been reported back to us, and we have received four lists from the city, and those have been in the process of being worked yesterday and today. And I understand that process is going very well and fairly expediently.

Mr. **Roe**. Okay.

Mr. **Peterson**. And we are getting nearer the point of completion of those homes.

Mr. **Bilbray**. You need more?

Mr. **Peterson**. We need to look at all of those that have been identified to us, but I just do not see a reasoned or reasonable approach to this, to look at 8,000 homes. And I do not think anybody at this dias would.

Mr. **Bilbray**. Well, how many have you got so far? You have got what? Several hundred?

Mr. **Peterson**. There are four lists. I would ask the city to tell us how many they had on the list. Because I have not seen the list, but it was provided by the city. People who called in on the hot line set up to report uninsured damages, buildings the city had and one or two declared unfit for occupancy, names of people the United States Steelworkers Union had on mobile home residents, *et cetera*. And names of people called in for building inspectors are calling out the worst reported damage. And we certainly want to respond to the city's request on that. And I think we are doing that. I would like the city to respond.

Mr. **Bilbray**. So, how many names, Mr. Bloomquist?

Mr. BLOOMQUIST. I was just to Joe Titus, our building superintendent over here, and he said it has been approximately 1,000.

Mr. BILBRAY. A thousand names of residents have been submitted to FEMA to check out. Is that correct?

Mr. BLOOMQUIST. Yes, sir.

Mr. BILBRAY. Is that enough?

Mr. PETERSON. I think——

Mr. ROE. Would the gentleman yield? I do not want to push this issue at this point. I do not mean that disrespectfully. Let us not nail it down to 1,200, 1,400.

Mr. BILBRAY. Well, I am just worried, Mr. Chairman, we are going to get down a week from now and FEMA is going to say we do not have enough names.

Mr. ROE. If the gentleman would yield. Let us not bring the negative. Let us leave it positive. I think——

Mr. BILBRAY. That is hard to do.

Mr. ROE. We seem to be moving in a very positive approach and we will know if it is negative, we will know about it, but let us not create it.

Mr. BILBRAY. Okay. I have one other question in another area, then.

Mr. ROE. The gentleman is recognized.

Mr. BILBRAY. We mentioned earlier that the county has met with Kerr-McGee, has gone through an inspection process, has reached certain agreements. The City of Henderson has stated the fact that they have been apprised of what is going on in this particular agreement. Is there any reason that the representatives of the City of Henderson should not be part of any future negotiations with Kerr-McGee? I know this is a county island—which is a very sore spot, by the way—and something that I am sure the next legislature will have to look at very carefully. But the fact is, is there any reason why the city should not be involved in this process? They are the ones that really are the closest to any potential problem.

Mr. PAPPAGEORGE. Yes, Mr. Bilbray. I am not certain that they were or have not been invited. I know that the negotiations that were conducted at Kerr-McGee—I was with Commissioner Woodbury at Sparks, Nevada—and he asked me to be sure to invite Chief Starr who happened to be in Sparks, Nevada, the day of the negotiations, to those negotiations, which would have been impossible for him to go. But the spirit of Commissioner Woodbury is that they do participate.

Mr. BILBRAY. Has he participated?

Mr. BLOOMQUIST. We have missed on the participation. It is our fault. It is not the fault of the county.

Mr. BILBRAY. I assume you will be—any future ones, you will participate in.

Mr. BLOOMQUIST. Under penalty of death, we will miss the next one.

Mr. BILBRAY. That is, all I have, Mr. Chairman.

Mr. ROE. The Chair—I beg your pardon. The gentleman from California has an additional question he would like to ask.

Mr. KONNYU. First of all, Mr. Peterson, I would like to find out something about FEMA rules in determining losses. Conceptually, at least, I think the biggest loss in this explosion in terms of people outside the plant was the loss in property value. That is, not the damage but rather the property value that could have had before the explosion and the property value that you cannot have now if you indeed must, or cannot, sell any homes in Henderson. That is influenced by not only the past, but that there is another plant that could, God forbid, explode still around in this area.

Is that part of a determination of any valuation in your business, in your shop?

Mr. PETERSON. No, sir. There is no—it is not part of the process. There is nothing in the determining, the disaster program, to address that kind of issue. That is something that might occur in any area of the country.

Mr. KONNYU. I think in my area, we are subject to earthquakes. And we certainly have—okay. But I did want to—that is obviously a tremendous cost that the people will have to silently suffer with because there does not seem to be a solution to it in terms of dollars; yet it costs dollars.

And, Mr. Pappageorge, one of the gentlemen that I just talked to outside mentioned this thing called a National Fire Code and whether Kerr-McGee is bound to, by your folks, or through some other means, to abide by the National Fire Code. And I think specifically something like a 400-yard separation was mentioned. Things of that sort of explosive products. Is there such a relationship?

Mr. PAPPAGEORGE. Yes. The State of Nevada does have in effect the National Fire Code, which we are obligated to——

Mr. KONNYU. That is the model fire code as opposed to a law. Or is it a law?

Mr. PAPPAGEORGE. It is a model code and it is adopted by reference which gives us the authority to enact certain features of that. However, you used the term, "explosive;" ammonium perchlorate has not been classified as an explosive by the—however, we do believe that it possibly could explode. So, we are certainly taking those things into consideration.

Mr. KONNYU. Thank you, Mr. Chairman.

Mr. ROE. Well, I want to thank all the witnesses that have been here before us. There are no further questions at this moment, but we would ask the good city officials and county officials not to leave yet because now the most important part of our review is going to be with the citizens. So, our next panel is going to be with a group of distinguished citizens. And they are as follows: Mr. Brian Greenspun, and Phillip Crawford, Elaine Arnold, Louis Kahn, Robert Seagraves and Joanne Richardson.

Well, ladies and gentlemen, we want to welcome you as our citizens panel, to join in. You have listened and you have been mighty patient today to all of the officials from both Federal, state and city and county levels. And we have yet as our last group that we will hear after we have a chance to reflect on your thoughts and ideas, we will be hearing from the panel, a final panel, those who are representing the two plants that are involved.

Now, having said that, we would like to call upon you each to make your presentation. Please try to be concise, as you listened clearly today, what your thoughts and observations are and some of the things that you have run into on the basis of the facts you have before you.

So, having said that, the Chair would recognize as he called the names, the first witness would be Mr. Brian Greenspun. Mr. Greenspun.

STATEMENT OF BRIAN GREENSPUN, PRESIDENT OF THE LAS VEGAS SUN

Mr. GREENSPUN. Am I on?

Mr. ROE. Yes.

Mr. GREENSPUN. Thank you, Mr. Chairman, and members of the committee. My name is Brian Greenspun. I am the President of the Las Vegas Sun. And I am very much grateful for the opportunity to address this Committee on Oversight and Investigations. I am especially pleased that we have the ability to speak to you just a few miles from the scene of what has been dubbed a "miraculous disaster". Because you are able to see firsthand the tragedy we survived and the potential devastation we avoided.

In an effort to be as brief as possible, I have attached a number of columns and editorials written by the publisher of the Las Vegas Sun, Hank Greenspun, and me during these past few weeks following the PEPCON explosion.

I have also attached a front-page column which was published in this morning's newspaper welcoming your committee to our community.

Mr. ROE. Does the gentleman want to yield at this point and have these recordings put into the record at this point?

Mr. GREENSPUN. Yes, I would, sir.

Mr. ROE. No objection. So ordered.[92] [93]

Mr. GREENSPUN. Thank you. I hope you take the opportunity to read these columns because they represent not only our opinions on the matters under investigation by this committee, but they also represent what I believe is the consensus of Valley residents who may for the first time have realized the nature of the risks we have been asked to take in the name of national security and are questioning the value judgments which for years have dictated a blind acceptance of the concept of giving our all in the name of defense.

Clearly, few other communities have been asked to give and, indeed, have given so much of our future as we have in Nevada in the name of patriotism. Going back to the aboveground nuclear test sites in 1950s to the continued underground testing at the Nevada Test Site, playing host—and quite proudly, I must add—to the finest fighter weapons training base at Nellis, giving up the use and enjoyment of millions of acres of our state land to the needs of the Federal Government, being forced to accept the political nonscientific solution to the nation's nuclear waste problem without regard for the wishes of the vast majority of Nevadans and, now, being asked to accept the unacceptable risks of living amidst the production of ammonium perchlorate, whose explosive potential has been demonstrated in living color on the television sets of the world to the horror of every citizen in this valley.

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[92] [93] The referenced articles are included with Mr. Greenspun's prepared statement.

I am here to tell you, Mr. Chairman, that the people of Las Vegas Valley are frightened and very much concerned. They are no longer, based on years of misinformation by the Department of Energy and other departments of the Federal bureaucracy, willing to accept blindly the assurances of our government that the defense needs of our country outweigh their right to live without fear of devastation from the very process which has shaken them out of their lethargy.

We have been asked time and again to heed the nation's plea to give more of ourselves than our neighbors in the other 49 states, all in the name of defense and national needs. And, yet, when the first sign of trouble arrives, the Federal Government has been nowhere to be found. Its checkbook is non-existent, as is its concern over those who have suffered.

This committee, however, seems concerned with the fundamental question of fairness to citizens of this country. We in Nevada are citizens, too, who feel betrayed by the very government which to date has sweet-talked us into accepting its dirty linen and, worse, its deadly linen.

How can we tell people who have lost their life savings or even those who have had to pay only the deductibles on their insurance policies that the risk of such explosions are theirs alone and not to be shared by the government in whose name these plants exist?

If the production of this chemical is vital to the needs of our country, I suggest there are saner alternatives than the re-opening of the plants in the middle of 650,000 people, soon to be a million.

As Congressman Bilbray suggested earlier, the government owns practically all of the vacant land in Nevada. It also has a keen financial and security interest in the continued production of this product. At the same time, we in Nevada have a desire to contribute to our defense effort where appropriate and, especially, when Nevada jobs can be a part of that solution.

But does it not make sense, Mr. Chairman, and members of this committee, to devise a package which includes a few of the millions of acres owned by the government in this state coupled with a financial package that would promote the building of these plants in a safer, more remote site. In this way, the risk of future explosions will not hang continually over the heads of mothers and fathers whose concerns for their children's well-being is far more immediate than the production of some chemical which can be made out of harm's way.

It is just a question of a little more effort on the government's part, rather than a continuation of an attitude that tells us we are less than first-class citizens in this country.

It is a question of government credibility. We ask only that our public officials in Washington reaffirm by its actions today and going forward that the fundamental precept that this is a government of and for the people is not one that we have come to learn, based on our perception, of a government that does it to the people.

And, if I may quite briefly, Mr. Chairman, based on what I have heard earlier this morning, add a few comments?

Mr. ROE. Certainly.

Mr. GREENSPUN. Much of what I have said has been discussed earlier by others far more capable than me. But I do speak with a certain knowledge, based on the concerns of many Valley residents who have sought assistance from our newspaper. Now, they do not question the need to produce ammonium perchlorate for national and defense needs, but they do question the need to produce it in the middle of this Valley.

And I use the term, "Valley residents" because, unlike I have heard from others this morning, this is not just a Henderson problem. I live in the heart of Las Vegas, some 12 to 15 miles away. I had two huge wooden front doors practically blown off the hinges. No big deal in terms of damage. It could have been had my family been home. And had there not been heavy winds at the time of the explosion to blow the cloud away, we can only speculate what possible damage there might have been to those throughout this valley. In my opinion—and I agree with you, Mr. Chairman, that this hearing should not deal only with the narrow issue of compensation, but as both you and Mr. Bilbray and others on the committee suggest, it should deal with how we all accomplish our national priorities with appropriate sensitivity to the local concerns by the Federal Government, our government.

I personally can handle my deductible payments, but there are thousands of people in this Valley who cannot and should not be expected to bear that burden. They have a legitimate right to look to the entity whose beneficial interest—who is beneficially interested in the production of ammonium perchlorate and that is the people of this country acting through the United States Government.

We can insure, Mr. Chairman, the loss of our homes and we can insure the loss of our businesses. And we can, even if you get right down to it, insure the economic loss of the lives of our children. But what we cannot do today and what I have yet to hear from today's people testifying is how do we assure life for our children?

I hope your committee can answer that and we stand ready to help. Thank you.

[The prepared statement of Mr. Greenspun follows:]

Testimony of Brian Greenspun, President of the Las Vegas SUN, before the Investigations and Oversight Subcommittee of the House Science, Space and Technology Committee.

Chairman Roe and members of this committee.

I am grateful for the opportunity to address this committee on oversight and investigations. I am especially pleased that we have the ability to speak to you just a few miles from the scene of what has been dubbed a "miraculous" disaster, because you can see first-hand the tragedy we survived and the potential devastation we avoided.

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I have also attached a front-page column which was published in this morning's newspaper welcoming your committee to our community. With your permission, I would like to incorporate these writings as part of the record of my testimony this morning.

I hope you take the opportunity to read these columns because they represent not only our opinions on the matters under investigation by this committee, but they also represent a consensus of valley residents who, many for the first time, have realized the nature of the risks we have been asked to take in the name of national security and are questioning the value judgments which for years have dictated a blind acceptance of the concept of giving our all in the name of defense.

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I am here to tell you, Mr. Chairman, that the people of Las Vegas are frightened. They are no longer...based on years of misinformation by the Department of Energy and other departments of the federal bureaucracy... willing to accept blindly the assurances of our government that the defense needs of our country outweigh their right to live without fear of devastation from the very process which has shaken them out of their lethargy.

We have been asked time and again to heed the nation's plea to give more of ourselves than our neighbors in the other 49 states, all in the name of security. And yet, when the first sign of trouble arrives, the federal government is nowhere to be found...its checkbook as non-existent as its concern over those who have suffered.

This committee, however, seems concerned with the fundamental question of fairness to citizens of this country. We in Nevada are citizens, too, who feel betrayed by the very government which to date has sweet-talked us into accepting its dirty linen and worse, its deadly linen.

How can we tell people who have lost their life savings or even those who have had to pay only the deductibles on their insurance policies that the risk of such explosions are theirs alone and not to be shared by the government in whose name these plants exist?

If the production of this chemical is vital to the needs of our country, I suggest there are saner alternatives than the re-opening of the plants in the middle of 650,000 people...soon to be a million.

The government owns practically all the vacant land in Nevada. It also has a keen financial and security interest in the continued production of this product. At the same time, we have a desire to contribute to our defense effort where appropriate and when Nevada jobs can be part of that solution.

Doesn't it make sense to devise a package which includes a few of the millions of acres owned by the government in this state, coupled with a financial package that would promote the building of these plants in a safer, more remote site. In this way the risk of a future explosion will not hang continually over the heads of mothers and fathers whose concern for their children's well-being is far more immediate than the production of some chemical which can be made out of harm's way. Its just a question of a little more effort on the government's part rather than the continuation of an attitude that tells us we are less than first-class citizens in this country.

It is a question of government credibility. We ask only that our public officials in Washington reaffirm by its actions, the fundamental precept that this is a government of and for the people and not one that continually does it to the people.

Thank-you.

5/12/88 An editorial

Thou shalt not kill

Thou shalt not kill.

There must be a higher authority than a greedy, soulless, out-of-state corporate structure that insists on placing Nevada citizens in peril of their lives.

It's barely a week since horrified spectators watched huge fireballs reaching toward the sky as black, billowing poison smoke spiraled upward like some death cloud. Explosions ripped the valley and for hours fear of a gruesome death toll clutched the hearts of all who watched in helpless terror.

The explosion and fire that leveled PEPCON and the Kidd marshmallow factory touched the lives of every resident in the valley.

The first proper, decent act of Kerr-McGee officials was to suspend manufacturing of the deadly ammonium perchlorate until they had an opportunity to learn what caused the explosive disaster at their sister producer, PEPCON. In announcing their intention to await official investigative procedures of the tragedy that, but for a miracle, could have been catastrophic to Clark County, the company acted responsibly.

But, firing up the ammonium perchlorate process without notice less than a week later is reprehensible beyond measure.

The fire department, EPA and other official investigative bodies are still sifting the ashes at PEPCON for clues as to what caused the bomb blast that shook our community and destroyed homes, schools, buildings and lives of valley residents. The activity is proceeding slowly, partly because the process demands precision and study and because the exact extent of the contamination at the site is not known.

It may be days or weeks before the cause of the blasts are revealed and protective measures, if there are any, can be employed to assure Clark County citizens that their worst fears will not be realized with a repeat of last week's disaster.

Can responsible people allow Kerr-McGee to go forward with its production of ammonium perchlorate in the face of all that's known and unknown? What parent can forget the tear-streaked faces of little children cowering under desks and tables in the schools which suffered damage from the blast? And who will ever forget the picture of the little baby who, hours after entering this world, was pelted with flying glass, suffering physical harm and who knows what mental scars during her first day of life on Earth.

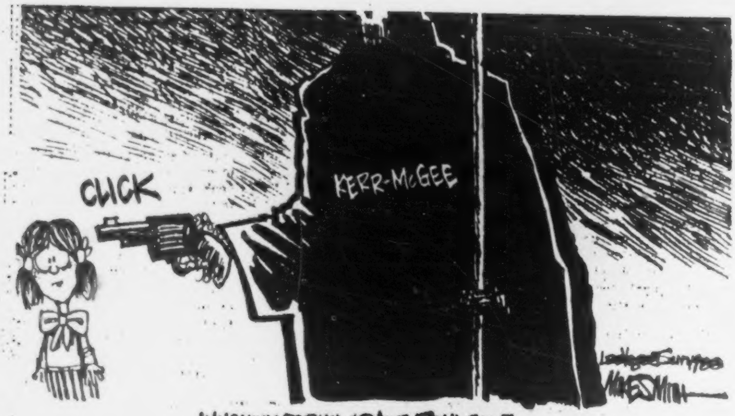
Kerr-McGee's decision to resume production without the benefit of knowing what caused the explosion is an act of barbarism. Its unfathomable actions remind us of the unanswered questions surrounding the mysterious death of Kerr-McGee's Oklahoma employee, Karen Silkwood.

Karen, who was contaminated with plutonium, died in a mysterious car accident while on her way to meet with a New York Times reporter. Plant records she carried in her car were never found.

Kerr-McGee officials deny suggestions that the Defense Department pressured them into the immediate, clandestine restarting of the operation to avoid a shortage of oxidizer for shuttles, MX missiles and other defense programs. While there are published reports from Pentagon and space agency spokesmen that there is enough fuel on hand for at least a year's defense-related activity, it is difficult to determine where truth lies. Regardless of the accuracy of the fuel status, are there not other, less life-threatening alternatives for our defense needs?

Are we again going to let the Washington bureaucracy tell us we have to destroy ourselves because of a speculative national defense effort? Are we going to allow an out-of-state corporate boardroom to give orders for our own deaths? They are demanding that our children face a life of never-ending peril.

See THOU SHALT NOT KILL, Page 4B



AMMONIUM PERCHLORATE ROULETTE

Thou shalt not kill

Continued from Page 1A

We cannot permit them to do this. We do not have to accept these orders. We live in a democracy where sane human beings do not have to sit idly by while our government decrees our potential extermination.

Kerr-McGee must be closed without delay and, if necessary, rebuilt at another remote site.

We sympathize with those whose jobs will be temporarily lost. They should be given every assistance by relief agencies. When the plants are re-located many miles away from the population center, their jobs will be there for them and they will do what Nevada Test Site workers do — travel to work by bus or car.

So far, one man has stood up like Horatio at the bridge.

County Commissioner Bruce Woodbury has called on every power he can muster — fire, police, law and other public officials — to keep the plant from re-opening. He requested a meeting at Kerr-McGee with the Clark County fire chief at 5 a.m. Wednesday and later called on County Manager Pat Shalmy and District Attorney Rex Bell to pursue legal action.

No one else seems to have the desire or the ability to do what is in the health and safety interests of Clark County residents. We must not forget that if the explosion occurred this Wednesday instead of last, there would not have been winds to carry the toxic fumes far from our valley. Thousands of residents would have suffered dramatic injuries had the hydrochloric acid hung lazily over this valley for any length of time.

Commissioner Woodbury is a father. He understands the devotion parents have for their children and the desire to keep them from harm.

It is far better to drive by our schools and see beautiful little children playing joyfully in the schoolyard, than watch in horror as charred or mangled bodies and blinded wounded are carried from a disaster area.

Like the sufferer of a mild heart attack, we have been warned that we cannot continue to live as we have done in the past. We simply cannot allow Kerr-McGee to continue at its present location nor can PEPCON be given permission to rebuild close to a populated area.

The lesson is starkly and devastatingly told in the ashes of PEPCON and in the hearts of the families who lost loved ones. We simply cannot allow a time bomb to tick away in the heart of any Southern Nevada community.

This is not a judgment to be based on government defense needs, speculative or real, or financial considerations. It is a choice between good, wholesome life or the horrible, dreadful holocaust of death.

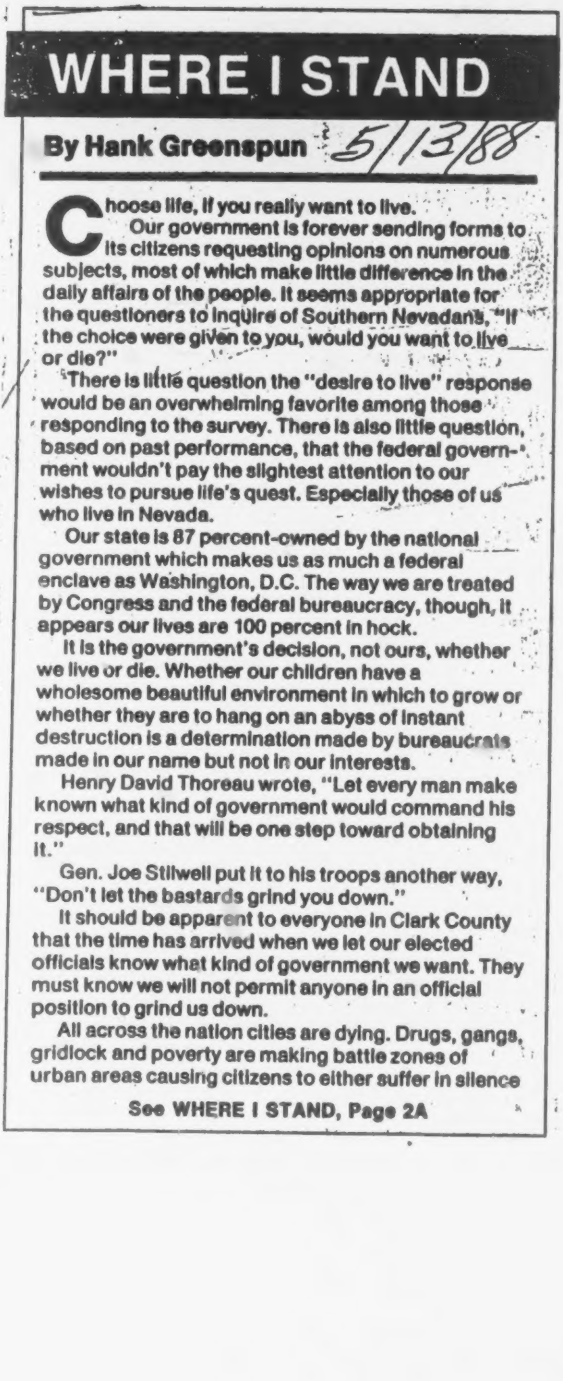
There is no more time to think, it is time to act.

A fire Wednesday at Kerr-McGee's neighbor, State Industries, could have been the cause of a second and far more catastrophic explosion ... while authorities are still wondering what caused the first.

The city of Henderson, whose residents felt the brunt of the disaster but by no means are alone in their continuing fear of further peril, should act immediately to demand that the Clark County Commission close the plants.

There is no more time to waste. It is a matter of life and death.

Hank Greenspun
Publisher



WHERE I STAND

By Hank Greenspun 5/13/88

Choose life, if you really want to live.

Our government is forever sending forms to its citizens requesting opinions on numerous subjects, most of which make little difference in the daily affairs of the people. It seems appropriate for the questioners to inquire of Southern Nevadans, "If the choice were given to you, would you want to live or die?"

There is little question the "desire to live" response would be an overwhelming favorite among those responding to the survey. There is also little question, based on past performance, that the federal government wouldn't pay the slightest attention to our wishes to pursue life's quest. Especially those of us who live in Nevada.

Our state is 87 percent-owned by the national government which makes us as much a federal enclave as Washington, D.C. The way we are treated by Congress and the federal bureaucracy, though, it appears our lives are 100 percent in hock.

It is the government's decision, not ours, whether we live or die. Whether our children have a wholesome beautiful environment in which to grow or whether they are to hang on an abyss of instant destruction is a determination made by bureaucrats made in our name but not in our interests.

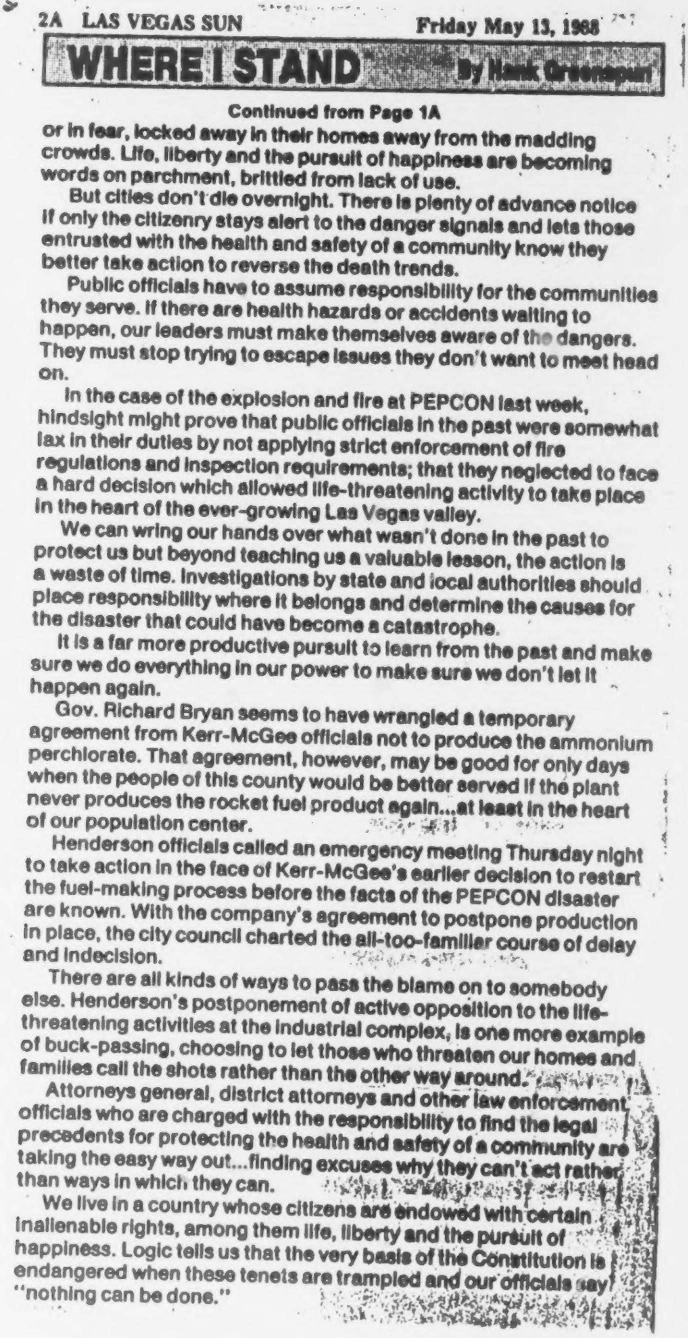
Henry David Thoreau wrote, "Let every man make known what kind of government would command his respect, and that will be one step toward obtaining it."

Gen. Joe Stilwell put it to his troops another way, "Don't let the bastards grind you down."

It should be apparent to everyone in Clark County that the time has arrived when we let our elected officials know what kind of government we want. They must know we will not permit anyone in an official position to grind us down.

All across the nation cities are dying. Drugs, gangs, gridlock and poverty are making battle zones of urban areas causing citizens to either suffer in silence

See WHERE I STAND, Page 2A



WHERE I STAND

By Hank Greenspun

Continued from Page 1A

or in fear, locked away in their homes away from the madding crowds. Life, liberty and the pursuit of happiness are becoming words on parchment, brittled from lack of use.

But cities don't die overnight. There is plenty of advance notice if only the citizenry stays alert to the danger signals and lets those entrusted with the health and safety of a community know they better take action to reverse the death trends.

Public officials have to assume responsibility for the communities they serve. If there are health hazards or accidents waiting to happen, our leaders must make themselves aware of the dangers. They must stop trying to escape issues they don't want to meet head on.

In the case of the explosion and fire at PEPCON last week, hindsight might prove that public officials in the past were somewhat lax in their duties by not applying strict enforcement of fire regulations and inspection requirements; that they neglected to face a hard decision which allowed life-threatening activity to take place in the heart of the ever-growing Las Vegas valley.

We can wring our hands over what wasn't done in the past to protect us but beyond teaching us a valuable lesson, the action is a waste of time. Investigations by state and local authorities should place responsibility where it belongs and determine the causes for the disaster that could have become a catastrophe.

It is a far more productive pursuit to learn from the past and make sure we do everything in our power to make sure we don't let it happen again.

Gov. Richard Bryan seems to have wrangled a temporary agreement from Kerr-McGee officials not to produce the ammonium perchlorate. That agreement, however, may be good for only days when the people of this county would be better served if the plant never produces the rocket fuel product again...at least in the heart of our population center.

Henderson officials called an emergency meeting Thursday night to take action in the face of Kerr-McGee's earlier decision to restart the fuel-making process before the facts of the PEPCON disaster are known. With the company's agreement to postpone production in place, the city council charted the all-too-familiar course of delay and indecision.

There are all kinds of ways to pass the blame on to somebody else. Henderson's postponement of active opposition to the life-threatening activities at the industrial complex, is one more example of buck-passing, choosing to let those who threaten our homes and families call the shots rather than the other way around.

Attorneys general, district attorneys and other law enforcement officials who are charged with the responsibility to find the legal precedents for protecting the health and safety of a community are taking the easy way out...finding excuses why they can't act rather than ways in which they can.

We live in a country whose citizens are endowed with certain inalienable rights, among them life, liberty and the pursuit of happiness. Logic tells us that the very basis of the Constitution is endangered when these tenets are trampled and our officials say "nothing can be done."

5/15/88

WHERE I STAND

By Brian Greenspun

The odds against Las Vegans are long. We have to do something to shorten them.

When skyjackings and bombings were the rage a few years ago, a number of sick stories traveled the humor circuit as is often the case when tragedy strikes.

There was one report of a young, well-dressed man — traveling with his wife and children — who was caught as he tried to walk through the airport metal detector with a bomb in his carry-on luggage. You can imagine the commotion his efforts caused as police and security agents descended upon him, taking the entire family into custody.

When he was asked to account for his life-threatening actions he pleaded innocent to the charges of intending to commit a crime. He explained, however, that it was his intention to carry the bomb on board the aircraft because he had read that the odds of a nut carrying a bomb aboard an aircraft were in the 100-1 range.

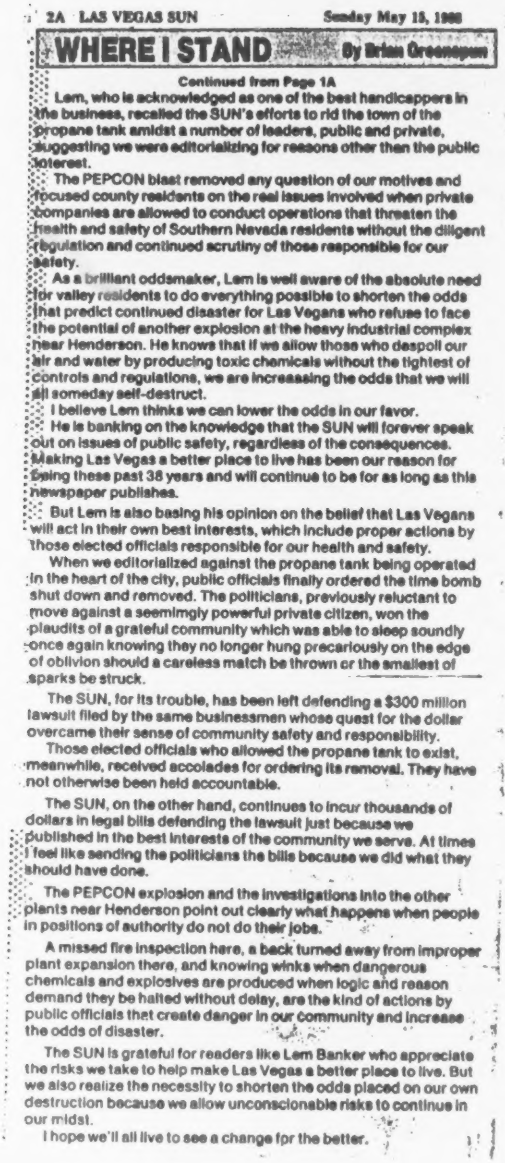
He further explained that the odds of two bombs being carried on board were prohibitive — in the million-to-one category. Hence, his actions were an effort to save the people on the plane from disaster.

Last week a loyal SUN reader, Lem Banker, called the publisher to say thank you for himself, his family and his friends for what he described as "saving their lives by keeping the community informed of dangerous or hazardous conditions." Lem was referring to the SUN's efforts a few years ago in exposing a 30,000-gallon propane tank perched in the middle of the city waiting, like a time bomb, to explode.

It was learned during our investigation that a rupture and subsequent explosion of the propane tank would have leveled homes and apartments for a mile or two in all directions, causing countless thousands of deaths and injuries and multi-millions of dollars in property damages.

The call from Lem and others with similar expressions of gratitude followed the "miraculous" explosion at the PEPCON plant near Henderson. While the blast killed two residents, injured a couple hundred others and destroyed multi-millions in property, the potential for catastrophe became readily apparent when experts suggested thousands could or should have been dead folowing the blast that thundered throughout the valley.

See WHERE I STAND, Page 2A



WHERE I STAND

By Brian Greenspun

Continued from Page 1A

Lem, who is acknowledged as one of the best handicappers in the business, recalled the SUN's efforts to rid the town of the propane tank amidst a number of leaders, public and private, suggesting we were editorializing for reasons other than the public interest.

The PEPCON blast removed any question of our motives and focused county residents on the real issues involved when private companies are allowed to conduct operations that threaten the health and safety of Southern Nevada residents without the diligent regulation and continued scrutiny of those responsible for our safety.

As a brilliant oddsmaker, Lem is well aware of the absolute need for valley residents to do everything possible to shorten the odds that predict continued disaster for Las Vegans who refuse to face the potential of another explosion at the heavy industrial complex near Henderson. He knows that if we allow those who despoil our air and water by producing toxic chemicals without the tightest of controls and regulations, we are increasing the odds that we will all someday self-destruct.

I believe Lem thinks we can lower the odds in our favor.

He is banking on the knowledge that the SUN will forever speak out on issues of public safety, regardless of the consequences. Making Las Vegas a better place to live has been our reason for being these past 38 years and will continue to be for as long as this newspaper publishes.

But Lem is also basing his opinion on the belief that Las Vegans will act in their own best interests, which include proper actions by those elected officials responsible for our health and safety.

When we editorialized against the propane tank being operated in the heart of the city, public officials finally ordered the time bomb shut down and removed. The politicians, previously reluctant to move against a seemimgly powerful private citizen, won the plaudits of a grateful community which was able to sleep soundly once again knowing they no longer hung precariously on the edge of oblivion should a careless match be thrown or the smallest of sparks be struck.

The SUN, for its trouble, has been left defending a $300 million lawsuit filed by the same businessmen whose quest for the dollar overcame their sense of community safety and responsibility.

Those elected officials who allowed the propane tank to exist, meanwhile, received accolades for ordering its removal. They have not otherwise been held accountable.

The SUN, on the other hand, continues to incur thousands of dollars in legal bills defending the lawsuit just because we published in the best interests of the community we serve. At times I feel like sending the politicians the bills because we did what they should have done.

The PEPCON explosion and the investigations into the other plants near Henderson point out clearly what happens when people in positions of authority do not do their jobs.

A missed fire inspection here, a back turned away from improper plant expansion there, and knowing winks when dangerous chemicals and explosives are produced when logic and reason demand they be halted without delay, are the kind of actions by public officials that create danger in our community and increase the odds of disaster.

The SUN is grateful for readers like Lem Banker who appreciate the risks we take to help make Las Vegas a better place to live. But we also realize the necessity to shorten the odds placed on our own destruction because we allow unconscionable risks to continue in our midst.

I hope we'll all live to see a change fpr the better.

5/19/88

WHERE I STAND

By Brian Greenspun

"There is a credibility and confidence crisis in the community that has to be cleared up."

That's what Clark County Commission Chairman Paul Christensen told a roomful of county residents who wanted to discuss the PEPCON disaster but were told they could not.

He explained, as only he can, that there "was no action and it was not a public hearing. Not every deliberation we make has to have the public hammer us on everything. There was nothing to be gained by a public hearing today. It would have been two or three hours of haranguing us. I wasn't interested in that."

Paul suggested that an emergency task force from outside the community with expertise in the matter be called in to study the issue and determine what happened.

Doesn't that sound just like a politician?

This newspaper has always favored the opinion of experts in complicated matters which by their nature are too complicated for busy and distracted public officials to absorb. We have also complained continually about the propensity of elected representatives to study a matter to death as a means of avoiding action on a controversial subject.

Paul's refusal to hear from the public Tuesday was a mistake.

Yes, it may have taken up a considerable amount of time the commissioners didn't want to give. And, yes, it may not have been the technically right time and place for discussion. But there were concerned and agitated citizens looking for someone to listen to them and that should have been a good enough reason for the chairman to exercise his discretion and let them talk — if only for a minute or two.

Clearly, the public would have "hammered" the commissioners for past sins in allowing a high-risk

See WHERE I STAND, Page 2A

2A LAS VEGAS SUN Thursday, May 19, 1988

WHERE I STAND

By Brian Greenspun

Continued from Page 1A

industry to exist within the populated centers of the valley. And when they were through redressing their significant grievances ranging from the fear of another explosion to the countenancing of continued toxic poisoning of the environment, they may have questioned the wisdom of allowing a marshmallow plant to co-exist in the midst of the most poisonous air producers in the valley.

Chairman Paul's plan to invite a group of outsiders into our community to tell us what happened sounds like a very productive enterprise. We could have a chemical engineer, an explosives expert, a defense specialist, an efficiency expert whose job it is to show ways and means to save money in the production of life-threatening chemicals and a fire expert who will approve the location of the extinguishers and the water pressure in the hydrants.

They will tell the commission that if everything they suggest is done in the manner prescribed, the risk of an accident happening will be so insignificant as to not be considered a risk at all.

Then they will give us a bill for their services.

The commissioners, each one trying to act in the best interests of the community they serve, will point proudly and defensively to the well-written report and decide not to decide what to do about the remaining plants floating on the county "island" near Henderson.

And life will go on, until the next accident happens — and it will — when the commissioners will drag out another panel of experts from outside the community to tell us that with both plants now in a state of disintegration, the risk of another disaster is significantly lessened.

Rather than spend a lot of time playing in this political fantasyland, I suggest a different panel of experts to advise the county commission. This group would come from inside the community where the disaster occurred.

Each participant would be chosen from among the people who experienced a human tragedy as a result of the explosion or, at the very least, came home to find their doors and walls splintered and windows shattered, thankful only that their families were at work or in school rather than in harm's way.

These experts would tell the commissioners what Richard Mecham tried to tell them Tuesday. "It doesn't matter what started that fire. If it happened, it can happen again."

That is as expert an opinion as this community should ever need. Anything else defies logic and hundreds of years of disaster-laden history.

The Las Vegas Valley has grown and continues to grow. That which co-existed many years ago because it was separated by many miles and an incredible ignorance of the risks involved no longer belongs in the middle of a population center.

Had the wind not been blowing at gale force the day of the explosion, the toxic clouds would have settled in over every home in Las Vegas, giving the Cable News Network a disaster story like they have never had.

Gov. Dick Bryan proclaimed that tragic day a "miracle" because of the relatively light losses incurred. He was right.

Paul Christensen claimed there is a "credibility and confidence" crisis in our community. He is right, too.

But the gap is between the people of Clark County and the folks we elect to protect our families from danger who refuse to act decisively. And it grows wider each day.

WHERE I STAND

By Hank Greenspun 5/29/88

It is written in the stars.

If Nancy and her Ronald can run the government of the most powerful nation in the world by consulting the stars, there is no reason why the SUN cannot follow the publisher's horoscope and prepare the attack.

Son Brian and I spent the better part of a very expensive day last week with a passel of lawyers preparing for a lawsuit launched against us by the owners of a 30,000-gallon propane tank. It was a day when all the experts — horoscopic, biorythmic and others of similar status — suggested this editor should be confronting problems head on, especially when right and justice were on my side.

The question before the high-priced legal counsel last week was how to defend a lawsuit seeking $305 million from the SUN because we editorialized about a propane time bomb that was planted in the middle of Las Vegas. Our voice and those of thousands of residents were heard when the county commissioners and later the Las Vegas fire chief ordered the propane tank removed to a less-destructive locale.

Now, instead of incinerating thousands of citizens when the tank explodes, it will only kill a few hundred unlucky souls who happen to be working or living near the more remote site. There are many Las Vegans who can sleep easier at night knowing that tank has been removed from their midst. The bill for that public service, however, is being borne by this newspaper because the cab owners blame us for the city's actions.

Would that we could act in the city's name, there would be many changes. The fact is, though, we can only inform the citizens of peril. It is their responsibility to spur their elected representatives to action.

The lawyers caused me to reflect back to the tremendous peril with which this city was faced when the cab company owners refused to move the time bomb that threatened to go off and obliterate nearby buildings like the Culinary Union Hall, First Interstate Bank and the Vegas World Hotel. Fortunately, city

See WHERE I STAND, Page 2A

WHERE I STAND

By Hank Greenspun

Continued from Page 1A

officials acted, albeit quite late in the game, and ordered the nuisance removed.

I believe that history repeats itself and if we don't learn from the past we are doomed to die reliving it.

We currently face another propane tank issue. This time it rests near the city of Henderson and, rather than threatening the people with a propane blast, this latest time bomb has an explosive force far greater than and a deadliness rating beyond what any citizenry should be forced to endure.

The imminent restarting of the ammonium perchlorate production at Kerr-McGee's plant near Henderson has most county residents worried that a repeat of the PEPCON disaster will occur and feeling helpless to do anything about it. They look to their elected officials who are still scurrying about trying to point their do-nothing fingers at everyone else for their failure to act.

This weekend's latest story from FEMA, the federal government's disaster assistance program, reports that Clark County residents do not qualify for special aid, even though their homes and businesses were destroyed with many families sustaining injuries as a result of the explosion that thundered through the valley.

This is no surprise. It is but one more manifestation of the federal government's belief that the only thing Nevada is good for is testing nuclear bombs and burying the country's radioactive waste. When they are trying to force something we don't want down our throats, we are told it is our patriotic duty to comply. We are serving the interests of our national defense.

When these "interests" practically blow up in our faces, our government turns a deaf ear to our pleas, forgetting thesacrifice we have made for our country's defense. It is a one-way street and things are not going our way.

Is there a lesson to be learned? Of course.

If we don't take action to protect ourselves and our loved ones, no one else will. We must take control of our own destiny in this valley and that of the Kerr-McGees of the world who produce to oblivion — ours — or we will have no one to blame when it is time to bury our apathy along with our families.

There is no team of "safety" experts alive who can guarantee the safe running of a production facility. There is no one who can guarantee there won't be some human error — some welder's spark or butane lighter's flame — that will accidentally cause a fire that will create the disaster the PEPCON blast so miraculously avoided.

This knowledge is not just in the stars. It is in the hearts and minds of every resident of this valley who knows we won't be so lucky when the next bomb explodes.

It is time for the city of Henderson to seek the closure of the Kerr-McGee production facility. Henderson must demand that the County Commission close that plant now. There is a nuisance statute on the books. It is designed specifically to protect the health and safety of the citizens of this county. It helped get rid of a propane tank poised for disaster and it is well-suited to rid us of the threat of another PEPCON.

Public officials must do their utmost to protect the citizens they serve. If they choose to ignore their responsibilities to their friends and neighbors, the SUN will follow its star. We will file the complaints and fight the battles.

But this time, we'll send the bill to those officials who refuse to act.

WHERE I STAND

By Hank Greenspun 6/16/88

"Judge sets execution date."

Judge John Mendoza Tuesday set a date for Sean Patrick Flanagan to be executed for the murder of two human beings.

That is a judicial obligation under the penal code in states that allow the death penalty. If you kill somebody wantonly, maliciously or recklessly, the penalty can be death.

Some judge in Las Vegas will soon be asked to set an execution date for perhaps hundreds or even thousands of schoolchildren, senior citizens and persons of ages in between who are guilty of absolutely nothing ... except living in Clark County.

Perfectly innocent humans who decided to make their homes in Clark County will be blown to cinders because some large out-of-state corporations have decided to defy the county officials and manufacture ammonium perchlorate even though county fire officials say they are in violation of safety codes.

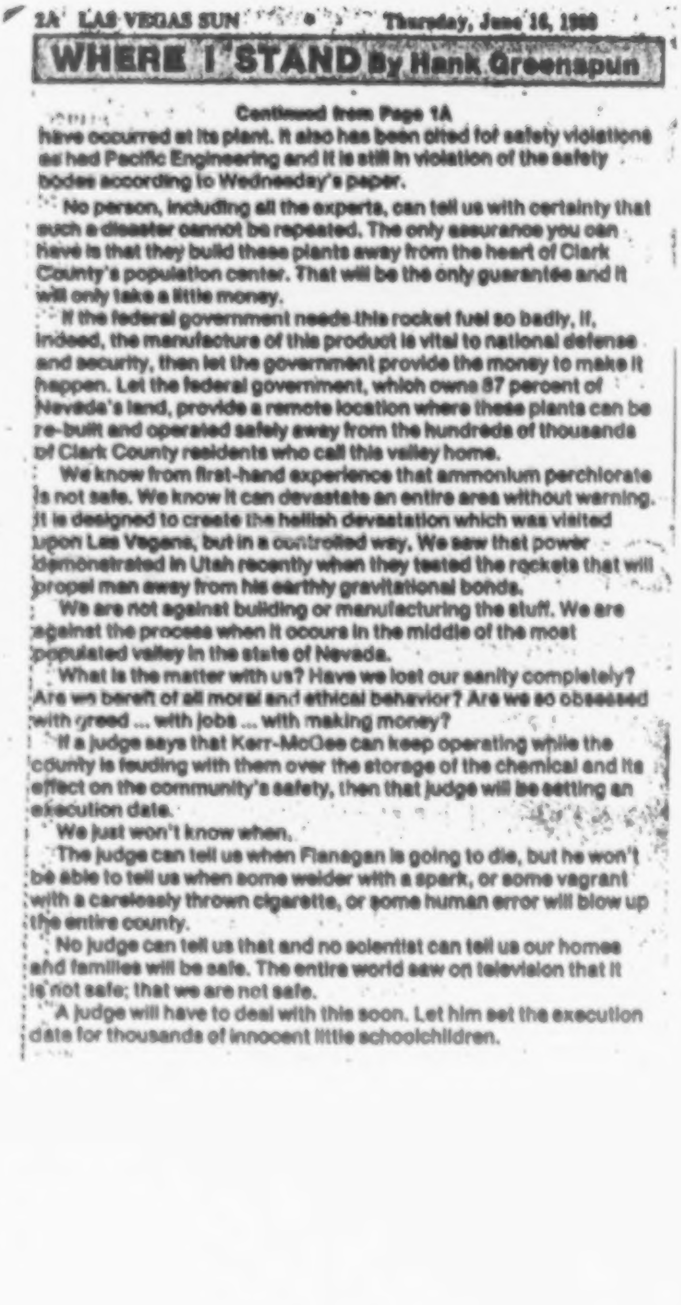
We know how devastating, how hellish are the flames of this rocket propellant because not only Las Vegans but the entire world was shown the effects of the PEPCON tragedy in living color on the Cable News Network.

Through some sign, possibly divine, we were shown what could happen when Pacific Engineering and the marshmallow plant next door were totally leveled. We viewed the explosions while we were in California. And when my wife called me to watch CNN, I thought of my children, grandchildren and all the people of Clark County and it was like the end of the world happening in front of my eyes.

The commentators spoke about the poisonous cloud which was going to encompass the entire valley and like a manifestation from the heavens, strong winds appeared and blew the cloud away. It will never be known the amount of lives that were saved.

Kerr-McGee manufactures the same poisonous, hazardous, explosive chemicals in even greater quantity than did PEPCON. The exact same accident could

See WHERE I STAND, Page 2A



2A LAS VEGAS SUN Thursday, June 16, 1988

WHERE I STAND By Hank Greenspun

Continued from Page 1A

have occurred at its plant. It also has been cited fof safety violations as had Pacific Engineering and it is still in violation of the safety codes according to Wednesday's paper.

No person, including all the experts, can tell us with certainty that such a disaster cannot be repeated. The only assurance you can have is that they build these plants away from the heart of Clark County's population center. That will be the only guarantee and it will only take a little money.

If the federal government needs this rocket fuel so badly, if, indeed, the manufacture of this product is vital to national defense and security, then let the government provide the money to make it happen. Let the federal government, which owns 87 percent of Nevada's land, provide a remote location where these plants can be re-built and operated safely away from the hundreds of thousands of Clark County residents who call this valley home.

We know from first-hand experience that ammonium perchlorate is not safe. We know it can devastate an entire area without warning. It is designed to create the hellish devastation which was visited upon Las Vegans, but in a controlled way. We saw that power demonstrated in Utah recently when they tested the rockets that will propel man away from his earthly gravitational bonds.

We are not against building or manufacturing the stuff. We are against the process when it occurs in the middle of the most populated valley in the state of Nevada.

What is the matter with us? Have we lost our sanity completely? Are we bereft of all moral and ethical behavior? Are we so obsessed with greed ... with jobs ... with making money?

If a judge says that Kerr-McGee can keep operating while the county is feuding with them over the storage of the chemical and its effect on the community's safety, then that judge will be setting an execution date.

We just won't know when.

The judge can tell us when Flanagan is going to die, but he won't be able to tell us when some welder with a spark, or some vagrant with a carelessly thrown cigarette, or some human error will blow up the entire county.

No judge can tell us that and no scientist can tell us our homes and families will be safe. The entire world saw on television that it is not safe; that we are not safe.

A judge will have to deal with this soon. Let him set the execution date for thousands of innocent little schoolchildren.

Mr. ROE. I thank the gentleman. Now, we want to hear from Mr. Phillip Crawford.

Mr. CRAWFORD. Yes, sir.

Mr. ROE. Mr. Crawford, these mikes are tough.

STATEMENT OF PHILLIP CRAWFORD, B.A. PRODUCTIONS, HENDERSON, NV

Mr. CRAWFORD. My name is Phillip Crawford. I represent B.A. Productions in Henderson, Nevada. I came back to Henderson three years ago and have gone into the third year, set up a manufacturing plant that produces wall decor. It is an assembly of picture frames, pictures and so on and so forth. My company was approximately one mile to one mile and a half behind the PEPCON—so-called PEPCON building—when it blew. I had an employee injured at the particular time. There was a particular situation that I am not expressly to speak about—because of litigation—that our company was not able to be insured at this particular moment.

My company, when the blast went off—the next day, after I called the City of Henderson and told them the situation with the City of Henderson of what we sustained in damage out there. They said that the FEMA people would be out to my plant and when they came out to the plant that they would be setting up stations for the businessmen and the people in Henderson in which to report damages and such, to take information.

Nobody showed up at the plant. And nobody set up stations. This was a bunch of bull. And I cannot be—I am not being as tolerable as most of the people are here today because my plant is virtually closing its doors because of the PEPCON blast. And the situation I am sitting here saying is, I would like to get answers—just answers.

I want to find out why PEPCON—a company of my nature that builds wall decor that hangs on a wall is required by some companies to carry $1 million worth of insurance for general liability, when you just stated that Kerr-McGee is carrying $1 million deductible, $300 million in liability—and why is Mr. Gibson being left out of this whole situation and why were they only carrying $1 million worth of liability?

Mr. ROE. I have to get an answer for that.

Mr. CRAWFORD. Number 1 question.

Number 2 question, sir: Since I have been talking to all government agencies for over 10 to 20 days concerning the people in the Henderson area and about the publicity and so on and so forth, I have tackled every avenue that they have sent me up to: SBA, et cetera, et cetera. I have been told that there are no funds until October 1988 for any kind of recourse whatsoever. Not including FEMA. FEMA said that that was ruled out.

But why did it take 50-some odd days for all this information to come back to a businessman like myself, that had excess of $150,000 worth of materials blown out from underneath me, that I owned? Why did it take the government, itself—and every avenue that they pointed me to, it comes up to a dead end? There is no recovery for my people, my company. And every avenue that we go for and every avenue that we talk to, we get the same thing. We get a cover-up or we get this, or we get that. We don't get the right information.

Now the other question I want to express is, this has all been related to government. So far, we all know it makes rocket fuel. When I moved here, I was not aware of this. I would not have even set up here knowing it. They say ammonium perchlorate is not explosive. I worked in oil fields where I dealt with MAG M. And I have seen lightning hit these containers and blow them sky-high.

You are sitting out here on a bomb right now. Do you know how many lightning strikes that you have here in this valley in the summer months?

Okay. I called this to the Senator's attention, Chic Hecht's office, and I have worked with Mark Brown.[94] Mark Brown has been through my plant. The FEMA people came out on the second request as a request to me through Mr. Chic Hecht's office, through Mark Brown. The Governor's Office has been through my plant.

Yet, when FEMA came out the second time and they showed up at my door, they came with four people. It was FEMA, it was the City of Henderson, Building. It was SBA and the County Welfare. You know who came through my door? Two people. The City of Henderson walked through my door, looked up and said, "This place ought to be condemned." And turned around and walked out. Left the little guy in there from SBA. The bearded guy that came down from FEMA would not even get out of his air-conditioned vehicle to see the damage or assess the damage.

I went out and approached him. I said, "You take this back to Washington with you." I said, "I came out here and I walked clean down the—halfway down my building to tell you the damage is inside. Yet, you don't want to get out of your air conditioned vehicle because you say all you have to do is a windshield assessment."

Well, this is what I have put up with. And this is where I am sitting today. I am sitting here since 8 a.m. this morning to express what the people are going through in the City of Henderson, to express the situations that our government is not what you always call fair.

Under the situations I am sitting under right now, I have to go back and answer to my people today why they are not making payroll. I have to answer to my wife and kids why we have taken our life savings and blown it in Henderson, Nevada. Now, when I have to go home and talk to my wife and kids this way, I have very little respect for what I have heard here today. No time limits for when we can recover anything. No insurance to replace it with. And people losing their jobs.

I have heard more horror stories than this and the government is well aware of it because the Governor's Office has been contacted daily and there has been over 100 hours of calls between me and the government: local, state and Washington.

And these questions that are still going through my mind are still not answered. When I went up to SBA and found out there were none and I see on the media $33 million of my tax dollars—anyway you look at it, when you say, "government," that is my tax dollars. I do not care how you want to read it. Whether you come in and you give them a loan under naval or you give them a loan under SBA and you realize that over 50 percent of this nation's economy is based on the small businessman. And the small businessman is supposed to have a situation there that the government is supposed to be able to guarantee loans for it. Where is this money at? The government has already blown it. There are 1,500 other applications sitting there of my tax money that is not available and even if it was, I have to wait until it has been promised to 1,500 more people.

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[94] Mr. Brown is a legislative assistant for the Honorable Chic Hecht, Senator from the State of Nevada.

Now, we are in an emergency situation here and this is what I am hearing from our government. Now, those are the answers that I would like to get so that when I walk out of here, I have got something to tell my family. I thank you.

Mr. ROE. I thank you, Mr. Crawford. We will talk further. Let me hear from Elaine Arnold. Ms. Arnold?

STATEMENT OF ELAINE ARNOLD, HENDERSON, NV

Ms. ARNOLD. Thank you very much. My name is Elaine Arnold and I am in pretty much the same situation as this man.

Mr. ROE. Are you talking about a business?

Ms. ARNOLD. I own a business, 671 Sunset. It was badly damaged by the May 4th blast, to the extent that the warehouse had to be completely condemned and torn down. The only part that was able to be salvaged was the roof and the structural steel.

I also have an office building on this lot here and it was damaged to the extent—about $9,000. This was leased to a business company and they paid me $3,200 a month lease. Out of this money, I paid my expenses and my payments.

At this time, I am using up all of my savings to meet these payments. I have nothing left and my note is due in October to be renewed. My tenant had to relocate, so I no longer have a tenant. I do not know how long before I will be able to get another tenant.

I also have a $1,000 deductible insurance. The thousand dollars, I could have taken care of that problem, but I cannot pay out $3,000 a month. I was planning on sending my son to college and I have to give up these plans because nobody wants to do anything until it is too late. In another month, I do not own it. The bank owns it.

Why can you people not do something now?

Waiting is not going to be the answer for us. I have called all these government offices and I have asked for help, too.

"Can I get a small loan to tide me over?"

"We don't have any more money for the small business people."

They have no way to help us. I cannot wait two more months. I cannot wait at all. I do not feel I owe my government my property. And if I have to give up now, everything I have saved for is down the drain.

I have more to say, but I am too emotional to say it. Thank you.

[The prepared statement of Ms. Arnold follows:]

COMMENTS FOR CONGRESSIONAL HEARING

JUNE 24, 1988

JAMES AND ELAINE ARNOLD
210 Appian Way
Henderson, Nevada 89015

Gentlemen,

My business located at 671 Sunset Road was badly damaged by the May 4th PEPCON explosion, to such an extent that the Warehouse has to be completely rebuilt. The only part that could be salvaged was some structural steel and the slab. The framework had to be reinforced.

Also on this property was an Office Complex that was severely damaged. The doors were blown out, the walls pushed in, the ceilings were blown out, part of the structure was separated and cracks throughout the complex.

The repairs will take from 3 to 6 months, due to the amount of damages and lack of materials.

This property was leased at $3,200 per month. The tenant that was in there, was no longer able to work in the complex and has since had to remove their belongings and relocate.

I have mortgage payments and insurance, plus taxes and assessments. I have nearly exhausted my savings account and if I do not receive some compensation for these losses, I will lose my business.

I cannot understand why the government can afford to rebuild PEPCON, but can ignore the extensive damages and costs incurred by the citizens and business owners of Henderson, due to the PEPCON Explosion. Some business owners have closed their doors and have found themselves without a business.

Yearly Mortgage	$ 23,796
Taxes	2,020
Water/Special Assessments	1,800
Street Light Assessment	400
Insurance	2,100
	30,116
New Leasing Fee	1,920
	32,036

Income if property leased: $38,400.

Insurance Deductible: 1,000.

Warehouse Damages	109,868	(Insurance would cover)
Offices Damages	7,782	(Insurance would cover)
Fences	4,000	

Beldin Construction will do the reconstruction for the Warehouse and Office Complex for the amounts indicated.

Elaine Arnold

Mr. **Roe**. Okay. Calm yourself down. Lou Kahn?

STATEMENT OF LOUIS KAHN, HENDERSON, NV

Mr. **Kahn**. Good afternoon. I am with Industrial Component Systems here in Henderson. We are a small company. We handle industrial equipment. We were affected by the blast. We were knocked out of business. We just started moving back into our facility last week.

It is fine the Federal Government is considering bailing out PEPCON which is important. We need the ammonium perchlorate. Fine, all well and good.

But my point is if we bail out Pacific Engineering, I think there should be some stipulations. Number one: I think they should give business to people who have been drastically affected by the blast. Example: We have been virtually wiped out.

Pacific Engineering is not——

Mr. **Roe**. Are you in manufacturing?

Mr. **Kahn**. No, we supply. We supply equipment, controls, components for various types of industrial use. Currently, we are working on projects at the Nevada Test Site that are directly involved with the United States-Soviet Nuclear Venture.

So, it is not just Pacific Engineering that is involved with government projects. We are, as well. But I think that there should be some strings attached. Congress delegates where funds are going to be spent, where money is going to be spent. Well, fine. Okay.

We know we need ammonium perchlorate, yes. And we want to be a factor in rebuilding PEPCON. We figure that we can help this be accomplished. But we feel that there should be some strings, that PEPCON should or give us first preference as far as helping them rebuild. There are a lot of companies here that do not work in our field. Mr. Crawford over here and this lady next to me. They are suffering.

I think somehow that that $33 million or the $90 million figure, whatever it is going to take, I think maybe some of that could be allocated to help those folks out. I think if the funds are generated within the community instead of—nobody here is looking for handouts by any means. But I think if somehow if we could all work together, it is a win-win situation.

And let us face it: PEPCON is going to have massive legal problems. Maybe we can help alleviate that problem by working together.

There is only one other point I want to make here. With the funds that are being allocated to PEPCON, I do not think that any of those funds should be used for their legal problems that have arisen from the blast of May 4th.

So, I think the funds, yes, fine. Let us get the AP back in production by all means. But let us put some conditions there. Let us make it a little bit fairer for everybody. And I appreciate your time. Thank you.

Mr. **Roe**. Thank you, Mr. Kahn.

Mr. Seagraves?

STATEMENT OF BOB SEAGRAVES, HENDERSON, NV

Mr. SEAGRAVES. I am a veteran of World War II, having been a lieutenant at the age of 19. You will understand the reason I comment later. And after World War II, my rich uncle paid for my education in chemical engineering at a very expensive university, Washington University in St. Louis, Missouri. I have also studied the law at St. Louis University and business administration at California State University.

I have, as you can tell, quite a few years' experience. I have been a plant manager, I have been a technical manager, an engineering manager in many, many locations throughout the world and throughout the United States.

I have worked primarily for American companies. My last contract was with the Saudi Government where I was a couple of levels below Sheik Zaki Yamani, who has since been fired by King Fahd.[95 96]

In 1986, I sold my home in Los Angeles and took an apartment in Las Vegas. This puts me midway between my daughter in Utah and my daughter in Anaheim. I have offered my services to the State of Nevada, to Clark County and the Town of Henderson for a fee of one dollar. To date, they have not accepted my offer.

I was almost, or at least I was considered to be, on the Blue Ribbon Panel, that the Governor appointed; however, a young fireman was appointed in my stead. No sour grapes in this because actually, I prefer to have the freedom of movement and expression that this permits me.

Publicly, Bob Miller did ask me—Lieutenant Governor Bob Miller—did ask me to assist the Commission in whatever way I could. I have not been asked to do that, yet. Frankly, I think it is because they do not know what questions to ask me. You almost have to be technically, I think, to do this.

However, I have offered—I have attended many of these meetings. In fact, I have attended every meeting except the one in Sparks, Nevada, of the Blue Ribbon Panel, and I have listened to a great deal of testimony and I have submitted reports, unsolicited reports to the Blue Ribbon Panel Committee for their possible use.

I also have a very brief statement here which I would like to read to you with your permission. This has been revised several times because the situation keeps changing, so, my word processor has been quite busy revising this one.

Reports in the Las Vegas newspapers have been that Mr. Keith Rooker, who is a vice president and general counsel for American Pacific—the parent company of Pacific Engineering and Production, commonly known as PEPCON—had visited members of the Defense Department in Washington. Rooker was seeking at that time a $30 million grant to rebuild PEPCON's ammonium perchlorate plant in Henderson, Nevada. He reported that his quest was successful. Later, it appeared that he was very successful. It ap-

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[95 96] Sheik Ahmed Zaki Yamani served for 24 years as oil minister for the Kingdom of Saudi Arabia. He was dismissed on October 29, 1986, by King Fahd Ibn Abd Al-Aziz due to apparent displeasure about his performance at the meeting of oil ministers from the member nations of the Organization of Petroleum Exporting Countries.

pears that the DOD will give PEPCON and Kerr-McGee $100 million in surcharges over the next five to seven years.

As concerned citizens and taxpayers, we believe that this could amount to a reward to PEPCON for blowing up their own plant. Of course, PEPCON claims they are not responsible for the disaster that completely destroyed the plant and resulted in the death of the man who was probably PEPCON's number one expert in the operation of the plant. The operation manager's name, I believe, was Bruce Hawker.

We have talked to certain members of the Department of Defense in the Pentagon and they claim that they need this product very badly and the neighboring Kerr-McGee plant, which is the only other producer of ammonium perchlorate in the U.S.A., cannot supply enough of this solid rocket fuel oxidizer. Therefore, their argument is they must get another plant built without delay. And PEPCON can probably rebuild faster than anyone else.

Well, I cannot accept this. PEPCON will not actually build the plant. This will be done by an engineering construction contractor and PEPCON is not an engineering construction firm.

Furthermore, I question the need for this product. So, the Space Shuttle program is delayed. It has been delayed before. I say let us give a little more thought to this decision and decide do we really want to see PEPCON rewarded in this matter because the jury is still out on the question of who is responsible.

However, regardless of the legal liabilities involved, management is and will always be responsible for anything inside their plants. The Department of Defense should understand this better than anyone. After all, is not a troop commander always responsible for the men and equipment in his command, or is the military, then, when we as citizen-soldiers served in past major military conflicts?

But back to the PEPCON situation. There are many people injured, many homes damaged by the explosion of this plant, raising many questions about the planning which went into these plants and the community that was built around them. It is easy to say, "We will not have a problem in the future, because we will not let them rebuild in the same place."

However, our questions: "Should we let them rebuild at all? Do we really need this rocket fuel oxidizer?"

Ammonium perchlorate is produced from sodium perchlorate. Sodium perchlorate is also an oxidizer. However, many years ago, the military decided they did not like sodium perchlorate because of the very visible sodium flame that is produced in the rocket exhaust.

Well, so what?

Visual sightings are not used much these days with all the electronic gear and radar. So, I do not really consider that an important matter.

At any rate, someone is going to decide that question. Once you have decided that question, then the question is: Should PEPCON be given another chance? Or should this opportunity or gift be given to somebody else? Should a different organization be given the opportunity to operate this new plant, which is really a DOD plant? The DOD will not look so good if they reward PEPCON as planned and then the courts decide several years later that PEPCON was legally responsible.

I say, "Take the profit motive out, build whatever plants the Department of Defense decides they need ultimately. Then give it to a contractor on a cost-plus basis like we operate the strategic petroleum reserve, on a cost-plus basis."

It is obvious that something was lacking in the PEPCON management. Management is always responsible and they cannot escape this responsibility. It is always easy to blame someone else such as Southwest Gas.[97]

However, this appeared to be grabbing at straws when this alleged blame first appeared in the Nevada press. And Kerr-McGee also appeared to be grabbing at straws when they used this "Southwest Gas was responsible" excuse for restarting their plant.

Nevada's Governor Bryan was correct when he asked Kerr-McGee to shut down again. The Governor and Kerr-McGee then entered into an agreement to bring in a team of independent experts to inspect the Kerr-McGee plant before restarting a second time. And, naturally, the team had to come from outside Nevada to avoid any appearance of a possible biased report from the team.

In fact, one of these so-called experts came from Canada. Why? Could not any experts be found in the United States? Must we import experts like we import foreign automobiles? This team of experts, bought and paid for by Kerr-McGee, did not find anything major wrong at the Kerr-McGee plant. In fact, the team of experts were surprised that the PEPCON plant blew up. And they made 10 innocuous recommendations which takes only about a week to implement. And that is "Katie bar the door," again.

Is this what we as citizens of this republic want?

We say, "Let's give a little more thought to this entire problem before making any decisions. Let us not be pressured into any decision. We do not believe that this is a matter that requires an instantaneous decision." And I know the British nor the Russians are coming.

Mr. Roe. I thank the gentleman.

Ms. Richardson.

STATEMENT OF MS. RICHARDSON, HENDERSON, NV

Ms. Richardson. I was asked to come to this meeting to tell what happened to my home and my family. On May 4th, I went to the hospital to get a prescription filled. The first boom—my thought was a car hit the building. I went to the front of the building as a common spectator to see what had happened. And I see an explosion.

I went over to use a phone in the labor department to call my aunt because I thought it was titanium that exploded. And the second boom—my daughter was about 10 feet away from me. She is 3 years old. I grabbed her and the windows and everything were starting to burst open.

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[97] See the statement by Fred D. Gibson, Jr., and C. Keith Rooker, Pacific Engineering and Production Company, *infra*. See also the rebuttal statement provided by Southwest Gas Corporation, Appendix I-3.

I ran out of the building as fast as I could. My sister and a six-year old was somewhere out in the car and I left as quick as possible. I went and got a couple of my nieces from their school and I went and got my son from his school and did not know what to do, where to go. And I thought by going to the lake—just anything to get away from Henderson. After all the calmness and everything, you know, was kind of over—or assumed over—we went to my home. I left my kids at my aunt's house because I did not want them up there. I live approximately two miles away from PEPCON.

When I got there, I thought everything was okay. No windows were broken, the ceilings were okay. My door was blown upon. I thought, "Now, somebody has broken into my home."

When I walked in, I walked into a mess. All my ceilings were blown in. My front room, my couch was ruined, my carpet was ruined, my kitchen ceiling was blown in. My two bedrooms were blown in and my son's bedroom was floating. I was then thankful that we were not home because if we had been, I can imagine my 3-year-old daughter being hit by the ceiling or, you know, my son playing—because my one son did not go to school that day. I am thankful that I did have to go to the hospital, though, and was not at home.

Now, every time I try to contact somebody to find out what is going on—you know, what anybody is doing—nobody knows anything. And then FEMA, I guess, they came by yesterday and I thought they were associates of PEPCON. I do not remember their names but I had called this one number and they kept telling me they would get back with me because I could not get anybody to come to my house. I have no insurance. I am one of the few. And they kept telling me, "Well, next week. Next week."

And then they told me that once they found out how much PEPCON was insured for, all the people left town. They ran. And so, finally, I called them and I said, "You guys keep thanking me for being so patient and everything, but I need something done. I am rebuilding my house for the second time." I built my home. And to have to come home to this and rebuild it again, without insurance, it is quite expensive. And, so, I am here to tell you what I am going through and to help, whatever I can, to hopefully get some funds to Henderson.

Mr. Roe. Thank you very much.

How about Ms. Walz?

STATEMENT OF PAMELA WALZ, HENDERSON, NV

Ms. Walz. Thank you. I have a ten-minute prepared statement here, but then, as the course of the meeting has progressed today, there are answers to some of your other questions that I have written down. So, I hope that you will indulge me and let me make my statement.

On May 4th, 1988, I was preparing my home for relatives to arrive from Germany. We live about three miles from the site of the PEPCON explosion. Just before noon that day, I heard a loud bang, which I suspected might be a sonic boom. A few minutes later, I saw thick smoke directly to the east of my home and felt sure that a plane had crashed. I quickly walked to the corner to try to see the cause of the smoke. As I was walking back up my driveway a much louder explosion occurred. A huge orange-black cloud rose up into the sky. I became eerily aware that construction workers behind my home were standing on the rooftops cheering the explosion.

I ran across the street to a neighbor's house, where the husband and wife said that a chemical plant was burning and that their walls had cracked from the explosion. They said they were getting out.

I ran back to my house to find that my front door, which I had left open, had been blown closed and the rug had been blown between the two doors, making it impossible to press the lever to open the door.

At this point, I heard my two-year old son crying inside the house, having been awakened from his nap. Using all my strength, I forced the front door open and ran in and scooped up my son. I ran to the kitchen to grab my purse and keys. In a panic, I picked up my phone to try to call my husband at work, but it was dead.

I then ran to the garage. At the time I reached the entryway and was standing just inside the front doors, an enormous explosion hit. The front doors were blown open and broken into pieces directly in front of us. They hit on both sides and bounced back and forth. A shock wave of thick, hot air hit us at the same time.

We were later to learn that it had cracked the wall 20 feet behind us. Staggered and still on my feet, holding my son, I went into the garage to open the door and get my car out. I found the garage door pushed in 15 inches and knocked off the tracks. Unable to close my house behind me, I ran across the street again and beat on the door with my fists. When my neighbor opened it, I said, "Get me the hell out of here."

My neighbor kicked his garage door to straighten it out and was able to open it. He backed out his van and his wife and my son and I got in. As we started down the street, we saw another neighbor carrying her daughter and called to them to get in the van.

We drove down the street and across an open construction site to get to Estes McDaniel Elementary School. As we turned down Foxridge Drive, where the school is located, we saw children out on the lawn at Foxridge Park. Over 700 children attend that school. Parents and children were running to their cars and I suddenly realized that all the children were sobbing. I saw the principal, Dr. Reedom, and called out the name of my daughter's teacher to her. She pointed in the direction that I could find her. When I got to the group of children, one of the little girls ran into my arms crying my name over and over. I knew that I could not take her with me but promised that everything would be all right and that her mother would be there as soon as she could. I prayed that I was not lying to her. The three mothers gathered up our children and another brother and sister whose parents both worked and got back into the van.

As we drove away, one of the mothers asked me, "Is your throat burning?" My reply to her was "I was hoping it was just me."

Our next stop was the child care center to try to pick up the youngest daughter of the working parents. We found that the employees were releasing children to anyone who came to get them. There was no way to make any verification because the phones were out in their building.

Our total group was 15 people in a van designed for 7. In search of a working telephone and trying to get away from any toxins in the air, we ended up at a gas station on Las Vegas Boulevard. At that point, all of the families except mine made arrangements to meet at a McDonald's on Tropicana west of the strip.

By the time I was able to get through to my husband's work place, he had left for home. At this point, we decided to try to get back home. We had heard on the radio that it was safe; however, we encountered police road blocks, who were letting absolutely no one back into Green Valley.

We stopped and waited about an hour and telephones came back into service. I reached a neighbor and was told that I could get back to my house by taking back roads. It had been three hours since the explosions.

When I arrived home, my husband was there and began showing me the damage. Two walls in our bedroom had cracks about 12 feet long. On one of the walls, the sheetrock had buckled. The doorjamb leading to the garage had been ripped apart and pulled away from the wall. The threshold of the front doors was ripped apart and the metal surfaces of the doors peeled back like a banana. The kitchen light fixture was hanging down to the floor supported only by the electrical walls. Covers to the attic entrances were blown down and fiberglass insulation was blown down out of the attic. I estimate total damage at $7,500. Our home was 10 months old on the day of the explosion.

There are 24 homes on our street and after polling my neighbors, I would estimate the damage at between $200,000 and $225,000 for all of us. We are insured, although in some cases the insurance company has not been willing to pay what contractors have said the repairs will cost.

We have been told that our houses devaluated 20 percent on the day of the blast, and would take about five years to catch up to where they should be. In my case, this would be about $25,000. We are also anticipating an increase in our insurance premiums.

The damage in our area was similar in each home. Everyone needs a new garage door, new front doors, sheetrock work and windows replaced. In some cases, glass could not be completely removed from the carpets, so they must be replaced. A few homes had wall studs broken and sticking through their walls. Some degree of roof damage is present in nearly all of the homes.

While many of us experienced muscle soreness following the blast, only one of our neighbors was seriously injured. This lady is a nurse and works nights. She was awakened by the explosions and was hit by her front door when the final blast occurred. She was knocked unconscious and required over 30 stitches in her scalp. She spent a night in the hospital and continues to suffer the effects of the concussion at this time.

The remainder of May 4th was spent securing our home and assisting our neighbors. I explained to my children that the place that exploded was all gone and that there was nothing to be afraid of.

I noticed that my 2-year old was very clinging and would not talk the remainder of the day except to repeat over and over, "What's going to happen?" That night he became ill with a temperature of 103.5. The following day he was diagnosed as having pneumonia. By Friday, my daughter, husband and I all had upper respiratory infections.

On Saturday, May 6, I noticed that my son was sleeping continuously and seemed to be having difficulty breathing. He was diagnosed as having an asthmatic reaction. He does not have asthma. He was given a shot to open up his breathing. During the next week, he experienced two more such reactions and I administered medication at home. The doctor said that he believed the reaction was caused by stress.

I also asked at that time, "Could this have been something that he breathed in from this cloud?" And I was informed that it could take years before they get any statistics on this.

On Monday, May 9th, the school reopened. That morning, my daughter awoke with a fever. I later discovered that other children had similar sudden illnesses that Monday morning. These children suffered real symptoms, but their mothers believed that they were brought on by stress and fear of returning to the place where they had been terrorized. I know of one such child who virtually did not return to school the rest of the year.

In the days following the blast, more and more information began circulating about the industrial complex in Henderson. The only plant most of us knew existed was Timet. It took several days for us to memorize the names PEPCON and ammonium perchlorate because we had never heard of them.

The next amazing fact that hit us was that there was another plant, Kerr-McGee, which also manufactured this product. Gradually, it came out that there are many chemical companies in that industrial complex, that no one had any idea what they manufactured. At this point, it was publicized that PEPCON owners had gone to Washington, D.C., to try to get funds to rebuild.

In the newspapers, I noticed—in newspaper photographs, I noticed a train parked right next to the charred remains of PEPCON. I suddenly realized that this was the same train that passes by our property several times a day, six to eight times, generally.

At the time we purchased our home, we were assured that there was no danger from the train and that it was only a few cars once a day. Within a week of the explosion, the train was running again. I had previously contacted the City of Henderson to inquire about the contents of the tank cars. I was unable to get an answer at that time. Following the explosion, I again contacted the City of Henderson to inquire about the contents of the tank cars and was told, "You don't want to know."

I informed the person to the contrary and told him that I was concerned about products from the industrial complex being transported past my home. His response was that I should have investigated all of this before I purchased my home. I was then told that the Public Service Commission would have the information I was requesting.

Upon obtaining a list, or at least a partial list of the chemicals transported on the Union Pacific spur, I contacted the EPA and the Federal Railroad Administration. The response I received from these agencies was that there was no regulation to prevent any railroad from transporting any chemical substance through any residential area and that the Federal Railroad Administration's responsibilities are related only to the safety of railroad employees and not to the surrounding residents.

I then contacted a doctor of environmental chemistry to determine whether my concern was justified. This is a person at UNLV.[98] I obtained descriptions of the chemical properties of those chemicals known to be transported on that spur. By far, the most disconcerting was liquid chlorine, shipped under pressure. One tankful, if ruptured, could blanket several square miles with a deadly chlorine gas 500 feet thick. This gas is heavier than air and would lay along the ground. The track in question runs through all of Green Valley, past McCarran International Airport and connects with the main line along Las Vegas Boulevard.

I have attended meetings of Governor Bryan's Blue Ribbon Panel and have realized that the more information we receive, the more we find we do not know. No government agency on any level has the ability at this time to monitor the transportation, manufacturing or storage of chemical compounds in this state. The few regulations we do have are flagrantly violated because the penalties are insufficient.

Kerr-McGee releases 15 times the allowable amount of chlorine into our air every hour. And yet this plant continues to operate. Indeed, they have the blessing of the Department of Defense and NASA.

I am a proponent of a strong defense of our country and the space program; however, I was never given a choice on whether or not to risk the health and safety of my family. I feel that we can produce ammonium perchlorate in Nevada and possibly in Clark County, but not in the middle of a city of 56,000 people.

For the DOD and NASA to pay a surcharge totalling tens of millions of dollars to these companies without stipulating safety factors regarding the plant, employees, and the community is irresponsible. The people of this area and the state are working hard to identify and correct deficiencies in these areas.

The actions of our Federal Government would appear to be a blanket endorsement of the status quo. My recommendation to all parties involved is to make the necessary zoning changes to preclude further heavy industry from locating in this area. At the same time, assist existing companies in rebuilding and relocating at a safe distance from population centers.

We must see to it that a clear zone is established where necessary to prevent the same problem from arising in the future. We could arrange for transportation for workers from Henderson who would then be working a greater distance from their homes. This is already a fact in the case of PEPCON which I had assumed would be rebuilding farther from the city.

On a state level, we would then need to continue to monitor and regulate the remaining companies to see if similar action might be necessary. With these steps accomplished, the transportation safety issue, as regards our populated area, would no longer exist.

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[98] University of Nevada, Las Vegas.

This hearing has served to relieve some of the emotion effects of our current situation by showing the residents of Henderson that our concerns are being addressed by the people who have the ability to help us. We will not be completely free of these effects until we are enabled to feel safe in our homes again.

Physical problems caused by the emotional upset include weight loss, sleep disturbances, gastrointestinal disturbances, asthmatic episodes and decreased immune responses. Emotionally, we have suffered inability to concentrate on everyday issues and over-reacting to any smoke or noise. Our children have regressed emotionally to behavior patterns related to a younger age at a time when parents have been incapable of giving them the understanding they need.

Our homes are currently in various states of disrepair. Families where both spouses are working have been unable to begin repairs because contractors work only during business hours. It will be necessary for these people to use their vacation time for this purpose. The rest of us are unable to leave the area because the repairs will consume most of the summer. The best therapy would be to remove ourselves from this situation by taking a vacation.

The pressure on the school staffs on the day of the blast was nearly unbearable. Teachers and other staff members were forced by circumstances to remain in the blast area while community residents fled. The teachers remained until all children were picked up from the school area. And I am referring to Estes McDaniel School where my daughter is a student. They had no way of knowing if there would be more explosions or whether the fumes were hazardous. Some had homes and families in the area which they could not go to. The last child was picked up from Estes McDaniel School at 4 p.m. The blast had occurred at noon.

Local businesses that did not suffer physical damage suffered a loss of business from local residents who were worried—out of cash and had to repair their own damages. Ten days after the explosions, I ordered a load of topsoil from a very popular landscape supply company. The delivery man said that they had had virtually no business since the blast.

One of the problems that I would like to see addressed is—right now, these plants are in this county island within our city and the city has no jurisdiction. And they get very little cooperation from the plants. If the plants were rebuilt on Federal land, we would have the same situation where people who are downwind, or have other problems, could not deal with these plants directly; therefore, I would say that the Federal Government has to see to it that environmental concerns are taken care of on their level.

The other thing that I would like to ask is, do we export any ammonium perchlorate or any products made of ammonium perchlorate?

Thank you.

[The prepared statement of Ms. Walz follows:]

Testimony to Congressional Committee
Pamela Walz, Henderson Resident
June 24, 1988

On May 4, 1988, I was preparing my home for guests to arrive from Germany. We live about three miles from the sight of the PEPCON explosion. Just before noon that day, I heard a loud bang which I suspected might be a sonic boom. A few minutes later I saw thick smoke directly to the east of my home and felt sure that a plane had crashed. I quickly walked down the street to the corner to try to see the cause of the smoke. As I was walking back up my driveway a much louder explosion occurred. A huge orange-black cloud rose up into the sky. I became eerily aware that construction workers behind my home were standing on rooftops cheering the explosions.

I ran across the street to a neighbor's house where the husband and wife said that a chemical plant was burning and that their walls had cracked from the explosions. They said they were getting out. I ran back to my house to find that my front door, which I had left open, had been blown closed and the rug had been blown between the two doors, making it impossible to press the lever to open the door. At this point I heard my two-year-old son crying inside the house, having been awakened from his nap. Using all my strength, I forced the front door open and ran in and scooped up my son. I ran to the kitchen to grab my purse and keys. In a panic, I picked up the phone to try to call my husband at work, but it was dead. I then ran for the garage. At the time I reached the entry-way and was standing just inside the front doors, an enormous explosion hit. The front doors were blown open and broken into pieces directly in front of us. They hit on both sides and bounced back and forth. A shock wave of thick, hot air hit us at this same time. We were later to learn that it had cracked the wall twenty feet behind us. Staggered but still on my feet, holding my son, I went into the garage to open the door and get my car out. I found the door pushed in fifteen inches and knocked off the tracks. Unable to close my house behind me, I ran across the street again and beat on the door with my fist. When my neighbor opened it I said "Get me the hell out of here."

My neighbor kicked his garage door to straighten it out and was able to open it. He backed out his van and his wife and I and my son got in. As we started down the street, we saw another neighbor carrying her daughter and called to them to get in the van. We drove down our street and across an open construction sight to get to Estes McDoniel Elementary School.

As we turned down Foxridge Drive where the school is located, we saw the children out on the lawn at Foxridge Park. Over seven hundred children attend that school. Parents and children were running to their cars and I suddenly realized that all of the children were sobbing. I saw the principal, Dr. Reedom and called out the name of my daughter's teacher to her. She pointed in the direction that I could find her. When I got to the group of children one of the little girls ran into my arms crying my name over and over. I knew I could not take her with me but promised her that everything would be alright and that her mother would be there as soon as she could. I prayed that I was not lying to her. The three mothers gathered up our children and another brother and sister whose parents both worked and got back into the van.

As we drove away, one of the mothers asked me "Is your throat burning?". My reply to her was "I was hoping it was just me."

Our next stop was the child care center to try to pick up the youngest daughter of the working parents. We found that the employees were releasing children to anyone who came to get them. There was no way to make any verification because the phones were out in their building.

Our total group was fifteen people in a van designed for seven. In search of a working telephone and trying to get away from any toxins in the air, we ended up at a gas station on Las Vegas Boulevard. At that point, all of the families except mine made arrangements to meet at a McDonalds on Tropicana west of the strip.

By the time I was able to get through to my husband's workplace, he had left for home. At this point we decided to try to get back home. We had heard on the radio that it was safe. However, we encountered police roadblocks who were letting absolutely no one back into Green Valley. We stopped and waited about an hour before the telephones came back into service. I reached a neighbor and was told I could get to my house by taking back roads. It had been three hours since the explosions.

When I arrived home, my husband was there and began showing me the damage. Two walls in our bedroom had cracks about twelve feet long. On one of the walls the sheetrock had buckled. The door jamb leading to the garage had been ripped apart and pulled away from the wall. The threshold of the front doors was ripped apart and the metal surfaces of the doors peeled back like a banana. The kitchen light fixture was hanging down to the floor, supported only by the electrical wires. Covers to the attic entrances were blown down and fiber glass insulation was blown down out of the attic. I estimate total damage at $7,500.00. Our home was ten months old on the day of the explosions.

There are twenty four homes on our street and after polling my neighbors, I would estimate the damage at between $200,000.00 and $225,000.00 for all of us. We are all insured although, in some cases, the insurance company has not been willing to pay what contractors have said the repairs will cost. We have been told that our houses devaluated twenty percent on the day of the blast and would take about five years to catch up to where they should be. In my case this would be about $25,000.00. We are also anticipating an increase in our insurance premiums.

The damage in our area was similar in each home. Everyone needs a new garage door, new front doors, sheetrock work and windows replaced. In some cases, glass could not be completely removed from carpets and so they must be replaced. A few homes had wall studs broken and sticking through their walls. Some degree of roof damage is present in nearly all of the homes.

While many of us experienced muscle soreness following the blast, only one of our neighbors was seriously injured. This lady is a nurse and works nights. She was awakened by the explosions and was hit by her front door when the final blast occurred. She was knocked unconsious and required over thirty stitches in her scalp. She spent a night in the hospital and continues to suffer the effects of the concussion at this time.

The remainder of May 4th was spent securing our home and assisting our neighbors. I explained to my children that the place that exploded was all gone and that there was nothing to be afraid of.

I noticed that my two-year-old was very clingy and would not talk the remainder of the day except to repeat over and over "what's going to happen". That night he became ill with a temperature of 103.5°. The following day he was diagnosed as having pneumonia. By Friday my daughter, husband and I all had upper respiratory infections. On Saturday, May 6th, I noticed that my son was sleeping continuously and seemed to be having difficulty breathing. He was diagnosed as having an asthmatic reaction. He was given a shot to open up his breathing. During the next week he experienced two more such reactions and I administered medication at home. The doctor said that he believed the reaction was caused by stress.

On Monday, May 9th the school re-opened. That morning my daughter awoke with a fever. I later discovered that other children had similar sudden illnesses that Monday morning. These children suffered real symptoms but their mothers believe that they were brought on by stress and fear of returning to the place where they had been terrorized. I know of one such child who virtually did not return to school the remainder of the year.

In the days following the blast, more and more information began circulating about the industrial complex in Henderson. The only plant most of us knew existed was Timet. It took several days for us to memorize the names PEPCON and ammonium perchlorate because we had never heard of them. The next amazing fact to hit us was that there was another plant, Kerr-McGee which also manufactured this product. Gradually it came out that there are many chemical companies in the industrial complex but no one had any idea what they manufactured.

In newspaper photographs I noticed a train parked right next to the charred remains of PEPCON. I suddenly realized that this was the same train that passes by our property several times daily. At the time we purchased our home we were assured that there was no danger from the train and that it was only a few cars once a day. Within a week of the explosion, the train was running again. I had previously contacted the City of Henderson to inquire about the contents of the tank cars. I was unable to get an answer at that time. Following the explosion, I again contacted the City of Henderson to inquire about the contents of the tank cars and was told "You don't want to know". I informed the person to the contrary and told him that I was concerned about products from the industrial complex being transported past my home. His response was that I should have investigated all of this before I purchased my home. I was then told that the Public Service Commission would have the information I was requesting. Upon obtaining a list, or at least a partial list, of the chemicals transported on the Union Pacific Spur, I contacted the EPA and the Federal Railroad Administration. The response I received from these agencies was that there is no regulation to prevent any railroad from transporting any chemical through any residential area and that the Federal Railroad Administration's responsibilities are related only to the safety of railroad employees and not the surrounding residents. I then contacted a doctor of environmental chemistry to determine whether my concern was justified. I obtained descriptions of the properties of those chemicals known to be transported on that spur. By far, the most disconcerting was liquid chlorine. Shipped under pressure, one tankful, if ruptured, could blanket several square miles with deadly chlorine gas five hundred feet thick. This gas is heavier than air and would lay along the ground. The track in question runs through all of Green Valley, past McCarran International Airport and connects with the main line along Las Vegas Boulevard.

I have attended meetings of Governor Bryan's "Blue Ribbon Panel" and I have realized that the more information we receive, the more we find we don't know. No government agency on any level has the ability at this time to monitor the transportation, manufacture or storage of chemical compounds in this state. The few regulations we do have regarding safety and environmental concerns are flagrantly violated because the penalties are insufficient. Kerr-McGee releases fifteen times the allowable amount of chlorine into our air every hour. And yet, this plant continues to operate. Indeed, they have the blessing of the Department of Defense and NASA.

I am a proponent of a strong defense of our country and of the Space program. However, I was never given a choice on whether to risk the health and safety of my family. I feel that we can produce ammonium perchlorate in Nevada and possibly in Clark County. But not in the middle of a city of 56,000 residents. For the DOD and NASA to pay a surcharge totalling tens of millions of dollars to these companies without stipulating safety factors regarding the plant employees and the community is irresponsible. The people of this area and the state are working hard to identify and correct deficiencies in these areas. The actions of our federal government would appear to be a blanket endorsement of the status quo.

My recommendation to all parties involved is to make the necessary zoning changes to preclude further heavy industry from locating in this area. At the same time assist existing companies in rebuilding and relocating at a safe distance from population centers. We must then see to it that a "clear zone" is established where necessary to prevent the same problem from arising in the future. We could arrange transportation for workers from the Henderson area who would then be working a greater distance from their homes. This is already a fact in the case of PEPCON. On a state level, we would then need to continue to monitor and regulate the remaining companies to see if similar action might be necessary. With these steps accomplished, the transportation ^safety issue as regards our populated area would no longer exist.

Mr. ROE. We really want to thank you all for a people's response, which is what public hearings ought to be about in the first place. Now, we are going to have some questions. I am sure I have a couple I want to ask and then we will go on from there.

First, let me recognize the gentleman from California. Do you have any questions?

Mr. KONNYU. No, Mr. Chairman.

Mr. ROE. The gentleman from Missouri?

Mr. VOLKMER. No, Mr. Chairman.

Mr. ROE. The gentleman from Nevada?

Mr. BILBRAY. I just have a question. The two ladies that testified, you live in Green Valley and you had damage. Where do you live, Ms. Richardson?

Ms. RICHARDSON. I live up behind Berkholder.

Mr. BILBRAY. Berkholder School. And both of you are at opposite ends, right? And both of you suffered. And what you have described is the damage to your neighborhood and your houses was the general problem with everybody's. Right? In your area?

And Ms. Richardson, you are uninsured totally on your house?

Ms. RICHARDSON. Yes.

Mr. BILBRAY. You had no mortgage payment at that point?

Ms. RICHARDSON. No. We built our home, so we did not have a mortgage loan.

Mr. BILBRAY. So, your damage is how much, total, did you figure out?

Ms. RICHARDSON. Approximately $10,000.

Mr. BILBRAY. And yours is?

Ms. WALZ. We have so far received a check from the insurance company for $4,600. However, more damage—people are finding damage all the time. Cracks and so forth. And when they get into the work, they are finding more damage. I estimate my total will be about $7,500.

Mr. BILBRAY. And what you are saying it is covered by insurance.

Ms. WALZ. I have $100 deductible.

Mr. BILBRAY. So, they will cover it all. You have not signed a release with the insurance company so far?

Ms. WALZ. No, I have not. What they will not cover is structural reports. And I have a little certificate, where the building inspector signs off for the City of Henderson, and they are telling me that that will be my structural report. When it comes time for me to sell my home, this is what I have to present to the buyers to say this home is structurally sound. The insurance company said they will not pay for all these people to get structural reports because they do not feel that the houses were structurally damaged.

Mr. BILBRAY. For the rest of the witnesses, as you went through, you told me how much damage and everything, but I was not sure how many of you were covered 100 percent by insurance, or 80 percent or 60. Ms. Arnold, I imagine you are not covered for your loss of income at all. You did not have that kind of policy, did you?

Ms. ARNOLD. No.

Mr. BILBRAY. So, whatever you are losing in revenue you are losing and that is not covered. Now, I do not know what—I presume FEMA will not cover loss of revenue. Maybe the Chairman knows on that. I do not know.

Mr. Kahn, did you have any insurance?

Mr. **Kahn**. No.

Mr. **Bilbray**. How much was your loss?

Mr. **Kahn**. $160,000.

Mr. **Bilbray**. And you lost it totally. Okay.

Mr. Crawford?

Mr. **Crawford**. Right now, our plant is not operating.

Mr. **Bilbray**. But how much was your actual damage?

Mr. **Crawford**. Damage? $150,000. $50,000 finished goods. $100,000 in supplies. Loss of the business by the end of the year, $1.8 million. Loss of business right now, $203,000.

Mr. **Bilbray**. Were you covered by insurance for the actual damage?

Mr. **Crawford**. Not during the time of the blast, no.

Mr. **Bilbray**. Not during the time. So you were uninsured, too.

Mr. **Crawford**. Yes, sir.

Mr. **Bilbray**. And $50,000 loss of goods, plus $50,000 structural damage.

Mr. **Crawford**. No. It is $50,000 in finished goods ready to go out the door; $100,000 to replace—at the time the PEPCON blast hit, it took four steel bay doors right off my building. I am located at 745 Sunset Road and I understand you were down there today or you were taking a tour down Sunset Road.

And there are a couple of other things, while you are asking me. Right across from me—you were asking about the FEMA amount. Loss of business covers anybody? How many days were they down for whatever period of time that they had to do repairs? Loss of business. Does this qualify as a fund from FEMA?

I know a situation, too, a gentleman across the way from me lost $200,000 in software from an engineering firm. He was here today, also. When you start taking these numbers and you start tallying them up, just what is here at this table, how in the hell did FEMA come up with their figures? That is what I would like to know.

The other situation, while I am back on the subject here, there is a few things that I really do want to know before this committee leaves today. You have heard everything. We have heard FEMA. We have heard everything so far we could possibly hear. What is going to be the immediate aid to the people that need the help to keep their businesses going, to help the people in Henderson to put their lives back on track that—we do not have all this time while you are making your decisions. And we are the ones really—what do we do? Do we get pushed off to the side, now?

Mr. **Roe**. Would the gentleman yield? Now, that is not necessary. Let me tell you something. We have been here, too, since 8 a.m. this morning and we flew 3,500 miles to be here to be helpful to the people of Henderson. So, do not, please do not lay down dictums to these people, because, you know, we are human beings and we are neighbors like you are. Now, you have got the whole power of this committee here and obviously it is pretty weighty. We are trying to solve something. Now, there are certain things that we can solve and certain things we cannot. Now, let us be honest with each other. If you listened intently for the last two and a half hours, we were trying to get your city people to talk to FEMA and give them information.

I do not want to see this hearing break up on a discordant note. I am making a whole series of notes here to myself to see where we can help you. As far as SBA is concerned, for example, I hear where you are coming from. We have got to get Congress to provide enough money to SBA on a priority basis—with the budget deficit—to be able to provide the resources to help out. I happen to think that people who do not want to move money into SBA are making a disastrous error because one day they may need help too. These are the broader-based problems we have got to deal with.

I think what would be helpful—now, Ms. Arnold and Mr. Kahn, you have made some very good points. And so did you, Mr. Crawford, and so did Mr. Greenspun. All of you have in this sense.

It seems to me and I just said, "Let us identify what is, specifically, Ms. Arnold's problem?" It has been now two months. Somebody ought to know about that in Henderson, Nevada. And somebody ought to know about that in the state. I asked my staff, "Well, does not the State of Nevada have some kind of an economic development program? Does the State of Nevada have an emergency program? Why do you not call the legislature into being and say, we need $5 million in emergency? Is there a Chamber of Commerce here? Is there a business community here? Have we asked Kerr-McGee—have we asked these people to get together and set up a revolving fund to help the small business? Who is thinking around here?"

Those are the kind of questions we ought to be asking each other. Not saying, "we have all got to go to Washington and bring back a bundle of whatever." There is a lot of things we could be doing in this community, I would think, at this particular time.

Now, regrettably, I also just mentioned to my staff, "We should have called the people, first, and laid out what are the problems and then called the different government agencies and asked them to respond to the questions you are giving to us."

So, forgive me if I am coming back—I am a little weary, too—if I am coming back a little too strong. I want to take down your problem and we will look into it directly. I want to know what we can do for Ms. Arnold. I want to know, is FEMA looking at that case right now? Is the city looking at that case right now? That is the point we have to find out.

Mr. CRAWFORD. Respectfully, sir, I would like to mention one thing.

Mr. ROE. Go ahead.

Mr. CRAWFORD. You said come and look at all these agencies and see about working together, et cetera, et cetera. Trying to find an avenue to work. If 100 hours of my time last week of trying to put that situation together between state, city, local and Federal has not been applied at this particular point, I would like to know where it is failing at.

Mr. ROE. I understand precisely what you are saying. And that is what we are going to try to do to be helpful. I do not know myself. I do not know what your state has available as far as any economic development fund. I do not know whether your state has an emergency fund. I do not know what they have. We have to find out.

Mr. CRAWFORD. Respectfully, sir, I have been told that none of this exists. This is the reason why I am sitting here at this committee hearing.

Mr. ROE. I respect that.

VOICE. All that money the Federal Government has got. Why not more concern with state government?

Mr. ROE. Order. Now, one thing the Chair will not tolerate, sir, fellow citizen, the Chair will not tolerate screaming and yelling. If you have got something to say and you want to testify come to the table and we would be delighted to listen to you.

Why do you not come on up if you have got something you want to offer to the group? Well, then, do not just shout from the back of the room.

Mr. CRAWFORD. Sir?

Mr. ROE. Go ahead—well, let us hear Mr. Seagraves for a moment.

Mr. SEAGRAVES. Yes, Chairman Roe. I just wanted to say, first of all, I think this committee has done an excellent job. And I have really enjoyed listening to all the testimony here. And I have really enjoyed your own handling of the situation.

I also want to add this postscript that to me in light of the remarks you just made. That rich uncle of mine is not so rich any more.

Mr. ROE. Which uncle?

Mr. SEAGRAVES. Uncle Sam. The GI Bill.

Okay. One other postscript. You might consider or you might have your friends in the Defense Department consider: If these plants are rebuilt, they are relatively small plants as chemical plants go. It is entirely possible in my opinion as a former project manager—I still have a few years left, I think I could still be a project manager—I think it is possible to build these plants on an offshore platform or even an oil tanker. And they would be outside of any state jurisdiction.

Mr. ROE. All right. We want to thank you very much for your testimony. Do not leave just yet. I have asked my staff—please do not leave. I would like them to talk to you and identify each one of your cases and we will take it up with FEMA, ourselves, today.

Ms. Walz?

Ms. WALZ. I had missed one of my little notes on the side of my page here. A thought that occurred to me, and I do not know if it has occurred to anyone else here, today; if PEPCON—okay, I know the results of the investigation are not in. From what has been published, it appears that PEPCON is at fault for the explosion in their plant. We are aware that they had many, many safety violations in the past and this is a possibility. Okay?

If PEPCON is a private company making profits from their operation, why are they not liable for the damage to these people? Why do we have to go to FEMA? When the cause is determined and they go to these people's liability carriers——

Mr. ROE. You should not make allegations to begin with. And I do not mean this disrespectfully.

Ms. WALZ. I understand. Whoever the culprit is.

Mr. ROE. Yes. But I think the point in question is we are now going to hear from both companies involved. They are our next people that are going to testify. We are going to ask a couple of those questions, ourselves, but let us hear what the company has to say. Is that okay?

Ms. **Walz**. Yes. I just wanted to pose that question.

Mr. **Roe**. I understand that. It is on the record. But I would like my staff to meet with each one of you individually. I want to get the name of the person—what is their problem? Where does it stand? They will pick that information up and we will take that up with the FEMA representative before we leave this city tomorrow.

Mr. **Crawford**. Sir, just one more question, if I may? Since it has been almost 50 days under investigation with no answer to the cause of what caused it—for that avenue to release, say, the liability money—or wherever it should come from—to assist to the aid of this area, why has not the government or the state stepped in with the county to resolve and take the barricades down legally to find out the real cause so that an action can be taken at that particular level? The barricade is a legal barricade, sir.

Mr. **Roe**. Would you mind repeating that question? I did not understand it.

Mr. **Crawford**. What I am talking about is the legal barricades that are being faced with the county. Okay? This is a project for the government that conducts the building of rocket fuel. For the government agency, is the way that I understand it and know it, there is not too much the government does not know when they are involved, buying a chemical or a process from some company that they solely are the support of.

What I would like to find out is why—like, there are many people that have liability suits against the PEPCON accident right now, why has this not been under an investigation between the state, the government and local? Not just the fire department for the determination of it, to eliminate the blockade of lawyers from the MGM blast to pursue the avenue of getting some of this money released instead of having to call the government and tell them to be responsible for all of it.

Mr. **Roe**. Well, I think what you are faced with here, we have got a whole legal set of suits pending, as I understand it. It is going to have to take that time in the courts. There is no better answer I can give you than that, because the government cannot come in and abrogate the courts, as you know.

Mr. **Crawford**. Yes.

Mr. **Roe**. All right. Let us break at this point. I would like to have our last group. And we thank you very much. And would you please talk to our folks right now?

In the meantime, our last panel for today, representing the production plant representatives; Mr. Frank Gibson, Pacific Engineering and Production Company, Henderson, Nevada and Mr. George Hennigan, Kerr-McGee Chemical Company of Henderson, Nevada. Would those two witnesses please come forward?

And will the witnesses please raise their hand and be sworn in for me, please. Okay. We want to swear in the witnesses that are going to testify, which would be Mr. Hennigan and Mr. Gibson. Would you please raise your right hand?

Mr. **Rooker**. Excuse me, Mr. Chairman. I also will be testifying. My name is Keith Rooker.

Mr. ROE. Mr.?

Mr. ROOKER. Rooker.

Mr. ROE. Rooker identified for the record. Those who are testifying, please raise their right hand.

[Witnesses sworn en banc.]

All right, now, the first witness I think we will hear from is Mr. Fred Gibson, representing Pacific Engineering and Production Company. Mr. Gibson?

STATEMENT OF FRED D. GIBSON, JR., CHAIRMAN AND CHIEF EXECUTIVE OFFICER, PACIFIC ENGINEERING AND PRODUCTION CO., HENDERSON, NV, ACCOMPANIED BY KEITH ROOKER, EXECUTIVE VICE PRESIDENT

Mr. GIBSON. Mr. Chairman and distinguished members of the committee, my name is Fred Gibson. I am Chairman and Chief Executive Officer of Pacific Engineering and Production Company. With me today is Keith Rooker, who is executive vice president.

We submitted a written statement and in addition to that, we will have an oral statement that Mr. Rooker will present for the statement for the company.

Mr. ROE. Okay, the formal written statement will appear in full. There is no objection.

[The prepared statement of Mr. Gibson follows:]

STATEMENT
OF
PACIFIC ENGINEERING & PRODUCTION CO. OF NEVADA

Fred D. Gibson, Jr (Chairman, Chief Executive Officer)
C. Keith Rooker, (Executive Vice President, General Counsel)
Suite B-30, 4045 South Spencer Street
Las Vegas, Nevada 89119
(702) 735-2200

PART I

As representatives of PEPCON we appreciate the opportunity to present testimony to this Subcommittee. The Subcommittee has requested that we address the following matters:

1. Our investigation of the May 4, 1988, accident that destroyed our chemical plant, with insight on cause.
2. Descriptions of discussions we have had with NASA and the Department of Defense respecting the replacement of the chemical plant.
3. Negotiations with city, county or Federal authorities concerning the location of a new chemical plant.

Part I of our statement addresses these three matters. Part II of our statement is derived from information presented to a task force composed of representatives of the Air Force and NASA on May 16, 1988, updated to the current date, and is provided as a supplement to Part I.

1. Investigation and Causation. At the threshold, it is critical that certain basic, simple and indisputable facts be noted. First, ammonium perchlorate ("AP") is an oxidizer that does not burn. Rather, when heated it provides oxygen to enable other materials that do burn to do so. This is its role in solid propellants.

Second, AP is not "rocket fuel." It is not fuel at all. As stated, it is an oxidizer that, when heated, provides oxygen to enable the fuel to burn. Any characterization of AP as rocket fuel, or as fuel at all, is simply incorrect.

Third, as manufactured, handled and stored at the PEPCON plant, AP by itself is not capable of explosion or detonation. By this we mean that in the particle sizes at which we manufacture, handle and store, and at the high levels of purity required by the specifications to which we manufacture, AP not only cannot by definition burn, but also cannot by itself explode or detonate.

Fourth, there are well-known hazards that must be avoided or protected against in the manufacture and handling of AP. If any fuel is mixed with any oxidizer (including, but by no means limited to AP) the combination will be hazardous. The more high energy the fuel, the greater this hazard will be. At very small particle sizes not manufactured, handled or stored by PEPCON, AP (like many other substances such as wheat flour or cornstarch) may be explosive.

Because of these simple and indisputable scientific and physical facts, the investigation and the search for the cause of the May 4 incident must necessarily focus on the identification and evaluation of the available source or sources of fuel sufficient to generate the large amounts of energy obviously present in the incident.

All potential fuel sources have been and are being examined. The most probable fuel source, and the only fuel source known to have been available in sufficient quantities to have provided the evident energy, is natural gas. The plant was traversed by a 16" high pressure natural gas line. There is evidence of the presence of a large leak in the area preceding the incident. The search for and evaluation of potential fuel sources continues, but is not expected to develop evidence of any candidate fuel source other than natural gas.

It was apparent to many witnesses to the May 4 accident that the initial fire that preceded the explosions was a hydrocarbon fire unrelated to AP. The fire was first observed in the center of the plant near a building housing batch processing and drying equipment. Several groups of PEPCON employees attempted unsuccessfully to extinguish the fire with water, a method that will extinguish combustion of a limited fuel supported by oxygen from AP. Prior to the first explosions, the fire had the appearance of a "blow torch" emitting from the ground about 60 to 80 feet in height. The first explosions that occurred after these observations were made were aerial explosions unrelated to AP, and required for their origin and energy sources entirely independent of AP. There is extensive evidence of fire emitting from the ground throughout the plant. These facts, and the statements of these and all other witnesses, continue to be evaluated.

In addition, there is an abundance of physical evidence at and around the plant site indicating the presence of natural gas fires at the point of discovery identified above, throughout the plant, and at locations removed from the plant where fires were burning from the ground. This evidence also continues to be evaluated.

PEPCON and its property insurers have engaged a team of independent professional investigators to analyze the origin and propagation of the fire and consequent explosions. This team is led by consultants having extensive experience in the aerospace industry, including particularly the handling and processing of AP and propellants containing AP, and in the investigation of incidents involving such propellants. This team has made every effort to assure that other proper investigating authorities, including particularly the Clark County Fire Department, are made aware of the properties of AP, and of all physical and other evidence that will bear on the ultimate determination of cause of origin and propagation. It is emphatically our wish, and that of these investigators, that all investigations be based on evaluation of all material evidence and a complete and substantially comparable course of investigation, and lead to the truth. Thus we doubt that any reports will be issued until all reports are ready to be issued.

The investigation is being conducted (to the extent possible under the limitations resulting from exclusive local fire department site control during the four weeks following the incident and from judicial action designed to preserve evidence in the interests of all parties) in the manner typical of the investigation of similar incidents in the aerospace industry and on government reservations, and is expected to result in a report comparable to the reports issued in such cases. When issued, probably in approximately 60 days, the report will be provided to this Subcommittee.

Until the investigation is concluded and the report is issued, discussion of the details of the investigation beyond the general matters discussed above would not be appropriate.

2. Discussions with NASA and the Department of Defense Regarding Facility Replacement. Immediately after the May 4 incident, we solicited a meeting with appropriate Federal officials. On May 16 we met with representatives of the Air

Force and NASA in Washington. Our purposes in requesting and attending the meeting were threefold:

a. Given the limited production capacity for AP in the United States, we believed, and believe, that there exists a critical national problem in assuring the supply of AP, and we wished to provide such information as was available to us regarding the definition and scope of this problem.

b. Given the fact that only two firms have manufactured AP in the United States since 1965 or 1966 (Kerr McGee and PEPCON), we wished to assure the government of our interest, and technical and managerial ability, to participate in solving the supply problem, and to present a facility recovery plan for consideration.

c. Given the uncertain financial condition of PEPCON following the accident, and our consequent inability to implement the proposed recovery plan without government support, we wished to discuss the question whether such support could be made available and, if so, what kinds of support might be available.

Our meeting was with a task group chaired by Daniel S. Rak. We had subsequent telephone discussions with Mr. Rak, Colonel Donald Bush, and General John Slinkard. The task group chaired by Mr. Rak analyzed the scope of the AP supply problem very quickly, developed alternative solutions, and made its recommendations. We were not, of course, privy to these deliberations. We were advised that the decisions made as a result of these deliberations included the provision of assistance to replace the production capacity lost in the May 4 accident, that such assistance was to be implemented by NASA, and that NASA would administer these matters through Morton Thiokol, Inc., under its existing contract for the manufacture of solid rocket boosters for the Space Shuttle Program.

Because the assistance extended will require that 100 percent of the funds for rebuilding be secured from private credit sources, and inasmuch as Pacific Engineering is unable even with such assistance to obtain such financing, a new corporation, PEPCON Production, Inc. ("PPI"), has been organized to build the new plant. PPI has executed a letter agreement with Morton Thiokol, approved by NASA, and is moving forward to secure the required private financing based on the government assurances therein provided. PPI has selected a contractor-designer that is one of the largest such firms in the United States, and that has already validated in writing our ability to build a new plant in a 6-month period. PPI is negotiating a contract with that firm that will include assurances that its scheduled recovery date of January 1, 1989, will be met. PPI has evaluated a number of sites, is in the final stages of the site selection process, and expects to announce its site selection next week. There are three sites now under consideration, including one site in Lincoln County, Nevada, one site on the Reservation of the Moapa Paiute Indian Tribe in Clark County, Nevada, and one site in another state. We anticipate that further discussions with NASA through Morton Thiokol will be required to arrange the required private financing, and expect to conclude these matters next week as well. Engineering and design will commence, based on process engineering we have already completed, by July 1. Construction is expected to commence prior to July 15. PPI has, of course, offered to negotiate a labor agreement with the United Steelworkers covering its operations, wherever they may be located.

In all of our discussions with NASA and Air Force personnel, they have been most supportive, although their interest has quite understandably not been in the provision of assistance to us, but has rather been in the assurance of an adequate and reliable AP supply in the national interest.

3. Negotiations with City, County and Federal Authorities Regarding Location. Except as described above, we have had no negotiations with Federal authorities. With respect to potential sites, we have had preliminary discussions with local government authorities having jurisdiction, and have received warm support particularly from the officials of Lincoln County, Nevada, and local officials in the state other than Nevada. Our discussions with Nevada state officials have generally been limited to matters touching on their responsibilities for permitting that are not within local control. We have had no contact with officials of other states, and believe none to be necessary regarding the

potential non-Nevada site. We hope to enjoy support and cooperation of Nevada state officials equivalent to that expressed by the local officials with whom we have met. Such cooperation and support will be indispensable to our ability to meet our obligations to the government if we are to locate in Nevada.

PACIFIC ENGINEERING & PRODUCTION CO OF NEVADA

PART II

Pacific Engineering & Production Co. of Nevada (PEPCON) was incorporated in November, 1955, by Fred D. Gibson, Sr., John D. Mueller and Edgar J. Marston, who were then associated as officers, owners and directors of Western Electrochemical Company (WECCO). The first ammonium perchlorate production facility in the United States was built and operated by WECCO. WECCO was acquired in 1955 by American Potash, which was in turn acquired by Kerr McGee in 1967.

PEPCON was initially involved in a number of enterprises unrelated to the production of Ammonium Perchlorate, but did carry on a research program directed to the development of a platinum substitute anode for use in the production of perchlorates. This was a continuation of previous Navy-sponsored research.

The research was successful, and in late 1958 a small pilot plant was constructed to demonstrate the feasibility and utility of the electrode at the request of the Navy and Aerojet General Corporation. This facility was expanded to

COMPANY DESCRIPTION

(Page ii)

7.5 tons per day in 1959, 15 tons per day in 1961, and 55 tons per day in 1981.

Production has been continuous since 1958 with a number of innovative ammonium perchlorate processes and products developed and perfected during the intervening years.

Coincident with the production of perchlorates a line of pollution abatement equipment was developed. There are more than 200 PEPCON installations in the United States and in other locations around the world.

In 1982 PEPCON merged with American Pacific Corporation, a California real estate development firm. For a variety of reasons, the association was not successful, and the merger was effectively reversed in 1985 with the publicly-owned company, American Pacific, retaining all of the Nevada operations. John E. Wertin, the previous principal owner and Chairman of the Board, took the real estate operations (other than in Nevada) private.

COMPANY DESCRIPTION

(Page iii)

PEPCON continued its pollution abatement business and undertook the development of land owned for many years near its plant as an industrial park. These activities were impeded by the Space Shuttle Challenger incident, PEPCON having made a major commitment to the Shuttle program in 1981 and having depended heavily on sales to that program prior to the incident. At the time of the disaster on 4 May 1988, PEPCON had returned to levels of production in excess of those prevailing prior to the Challenger incident, and was producing at an annual rate of 24,000,000 pounds.

INCIDENT REVIEW

- Events Leading Up To Incident
  - **Plant Conditions and Geography**
    - Electrolytic Operations For Production of Sodium Chlorate (SC)
    - Electrolytic Operations for Production of Sodium Perchlorate (SP)
    - Crystallization Operations for Production of Ammonium Perchlorate (AP)
    - Drying Operations
    - Blending and Packing Operations
    - Finished Product Storage
  - **Operations**
    - Electrolytic Production of SC and SP Normal
    - Crystallization Operations Normal
    - Drying Operations Normal
    - Blending and Packing Operations Normal
    - Finished Product Storage Area Normal
  - **Personnel: Total 120; 108 On-Site**
    - Plant Personnel: Total 60; 48 On-Site
    - Administrative Personnel: 60

INCIDENT REVIEW

(Page ii)

        - Alarms and Evacuation
    - **Gas Line Conditions**
        - High Pressure, 16" Diameter
        - Installed in or About 1956
        - Owned and Operated by Southwest Gas Corporation
        - Connected by Southwest Gas to Two Metered Connections in Plant for Boiler Fuel and Domestic Purposes
- Description of Incident
    - Gas Line Conditions
        - Evidence of pre-ignition leak(s) from line

INCIDENT REVIEW

(Page iii)

- **Videotape Review of Incident**
  - Ignition of Natural Gas Near Dryer Building
  - Aerial Explosion/Flash Ignition in Area of Dryer Building Above Building
  - Explosion Near Ground Next to Process Building
  - Explosion Near Ground West of Second Explosion Also Alongside Process Building
  - First Three Explosions were within 1-2 Seconds of One-Another
  - Fire Apparent to Witnesses Throughout Plant Site at Surface Along Gas Line
  - Aerial Explosion at West End of Loading Dock (Major Incident)
  - Final Major Explosion: Visible Gas Burning from Ruptured Pipe Before Aerial Explosion, Followed by Virtually Simultaneous Ground Level Explosion

INCIDENT REVIEW

(Page iv)

- Visual Metallurgical Examination of Pipe at Point of Last Major Explosion Strongly Indicates Rupture Owing to Over-Pressure; Pipe is ERW (Electrowelded, Using Pipe Metal) Pipe; Rupture is at Weld Seam; Opening at Major Rupture is Approximately 1 Foot Wide; It Appears that Some 200 Feet of Pipe Missing

- **Post Incident Issues**
  - **Maintenance of Critical Personnel**
    - All Salaried Personnel Working on Assigned Tasks
    - Advance Payment of $2 million received on 20 May 1988 to (a) Compensate Personnel, (b) Meet Costs of Restarting Pollution Abatement Equipment Business, and (c) Pay Critical Accounts Payable, Will Carry Operations Pending Receipt of Full Insurance Proceeds
  - **Completion of Site Investigation and Acquisition of Site**
    - Discussed Below

INCIDENT REVIEW

(Page v)

- Completion of Design and Engineering Drawings for Rebuilt Plant
  - Discussed Below
- Evaluation of Major Equipment Items at Incident Site for Potential Salvage
  - Discussed Below
- Placement of Orders for Long Lead Procurement Items of Equipment
  - Discussed Below
- Erection of Plant and Equipment
  - Discussed Below
- Completion of Investigation
  - Discussed Below
- Collection of Insurance Proceeds Totaling Approximately on to $33 Million
  - Discussed Below
- Assertion of Claim for Uninsured Loss Exceeding $15 Million
  - Discussed Below

INCIDENT REVIEW

(Page vi)

- Defense of Third Party Liability Claims and Assertion of Indemnity Claims
  - Discussed Below

NEW PRODUCTION PLAN

- Preferred Location
  - Critical Site Location Factors
    - Maintenance of Existing Allocation of Low Cost Hydroelectric Power Contract with Colorado River Commission of the State of Nevada
      - Each Pound of Ammonium Perchlorate Requires Approximately 5.5 KWH of Energy
      - Blended Power Costs Under Existing Contract are below $.02 per KWH
      - An Increase of Power Costs to $.05 per KWH, for Example, Would Increase the Price of AP by an Estimated $.25-$.30 per Pound; An Increase of Power Costs to $.08 per KWH Would Increase the Price of AP by an Estimated $.42-$.50 per Pound
    - Proximity to Existing Employee Base for Reconstruction and Operations
    - Availability of Water, Power Service (For Wheeling), Highway Transportation and Rail Transportation

NEW PRODUCTION PLAN

(Page ii)

- **Selected Site**
  - 500^{+-} Acres on Moapa Indian Reservation Located on Union Pacific Rail Line and One Mile From Ute Interchange of Interstate 15, Approximately 36 Miles North of Las Vegas
- **Alternative Site**
  - 500^{+-} Acres in Lincoln County, Approximately 48 Miles North of Las Vegas

NEW PRODUCTION PLAN

(Page iii)

NEW PRODUCTION PLAN

(Page iv)

- Phased Building Plan
  - Begin Process Engineering Drawings: 5 May 1988
  - Long Lead Items Ordered, Begin Grading and Site Plans, Begin Buildings, Structural, Mechanical and Electrical Drawings: 20 May 1988
  - Site Acquisition Complete: 15 June 1988
  - Grading and Site Plans Complete: 15 June 1988
  - Commence Site Work: 15 June 1988
  - Buildings, Structural, Mechanical and Electrical Drawings Complete and Commence Construction: 30 June 1988
  - Process Engineering Complete: 15 June 1988
  - Equipment Installation Start: 1 August 1988
  - Buildings Complete: 15 October 1988

NEW PRODUCTION PLAN

(Page v)

  - Equipment Installation Complete and Plant Startup Initiated: 1 December 1988
  - Full Operations: 1 January 1989
- Plant Design
  - Commitment to Replicate Prior Facility Absolutely to Minimize Time and Expense of Requalification or Recertification
  - Improvements in Power Supply and Switchgear Under Evaluation
  - Increase in SC Capacity Under Evaluation
- Initial Production
  - Startup and Shakedown: 1 December 1988
  - Full Operations: 1 January 1989

FINANCIAL ISSUES

- Pacific Engineering Financial Status
    - Accounts Receivable: $4 Million
    - Accounts Payable: $1.5 Million
    - **Insurance Coverages**
        - Buildings, Machinery & Equipment: $16.5 Million
        - Inventory and Work in Process: +-$12 Million
        - Business Interruption: $2.613 Million
        - Electronic Data Processing Equipment: $450 Thousand
        - Valuable Papers: $200 Thousand
        - Fine Art: $30 Thousand
        - Estimated Time to Realize Insurance Proceeds: 1 July 1988
    - **Uninsured Loss:** In Excess of $15 Million

FINANCIAL ISSUES

(Page ii)

- **Indebtedness**
  - Valley Bank of Nevada Term Loan: $10 Million (Secured by Buildings, Machinery and Equipment and 34 Acres of Land Comprising Plant Site Together with 90 Additional Acres at Gibson Business Park)
  - First Interstate Bank of Nevada Inventory/Receivable Financing: $1.28 Million (Secured by Pledge of Receivable from CSD in the Amount of $1.72 Million)
  - Valley Bank of Nevada Revolving Facility: $730 Thousand (Secured by Pledge of Inventory and Receivables)
- **Indebtedness of Related Corporations**
  - Great American Life Insurance Company: $5.7 Million Owed by American Pacific Corporation, Parent of Pacific Engineering (Secured by Lien on 400 Acres of Land at Gibson Business Park)

FINANCIAL ISSUES

(Page iii)

  - $4.381 Million in 16.25% Subordinated Debentures Owed by American Pacific Corporation (Unsecured)
- **Potential Third Party Liabilities**
  - Personal Injuries
  - Property Damages
  - Subrogation Claims
  - Amounts Not Determinable
- Summary
  - Current Assets in Excess of Current Liabilities: $2.5 Million
  - Insurance Coverages in Excess of Total Indebtedness: +-$10 Million
  - Potential Uninsured Loss Recovery: In Excess of $15 Million
  - Potential Exposure to Third Party Liability Claims

FINANCIAL ISSUES

(Page iv)

- Rebuilding Cost Estimates: Total $33,316,750
    - Land: $1,500,000
    - Utilities: Subtotal $2,300,000
        - Water: $200,000
        - Power Lines: $500,000
        - Substation: $600,000
        - Rail Service: $1,000,000
    - NonSeverables: Subtotal $4,675,000
        - Site Preparation: $100,000
        - Site Improvements: $1,500,000
        - Buildings: $3,075,000
    - Severables: Subtotal $22,240,000
        - Electrolytic Systems: $7,500,000
        - Storage Tanks: $200,000
        - Pre-Batching: $750,000
        - 1st Stage Crystallization: $750,000
        - 2nd Stage Crystallization: $500,000
        - Process Controls: $200,000
        - Refrigeration: $650,000

FINANCIAL ISSUES

(Page v)

  - Vacuum Crystallizer and Salt Dryer: $2,000,000
  - Dryer Systems: $900,000
  - Blender Systems and Associated Equipment: $750,000
  - Anode Plant: $500,000
  - Boilers, Demineralizers, Compressors, Auxiliary Pumps: $500,000
  - Miscellaneous Structural: $810,000
  - Miscellaneous Piping: $810,000
  - Miscellaneous Electrical: $1,620,000
  - Material Handling Equipment and Materiel: $1,300,000
  - Laboratory, Cafeteria, Office Equipment: $1,000,000
  - Employed Labor: $1,500,000
- Architectural and Engineering: $2,601,750
- Summary: Total $33,316,750
  - Land: $1,500,000

FINANCIAL ISSUES

(Page vi)

  - Utilities: $2,300,000
  - Non-Severables: $4,675,000
  - Severables: $22,240,000
  - Architectural and Engineering: $2,601,750
- Proposed Financing
  - Term Loan, 15 Years, 10% Fully Amortized: $31,000,000
  - Revolving Credit Facility for Working Capital Secured by Inventory and Receivables: $3,000,000
  - Available by Loan from PEPCON: $2,223,000
  - Required to Obtain Financing: 15-Year Contract Guaranteeing Purchases of a Minimum of 30,000,000 pounds per year; Alternatively, Government-Guaranteed Loan in the Amount of $31,000,000
- Litigation Exposure
  - Organization of New Corporation, PEPCON Production, Inc., as Subsidiary of AmPac Development Company, a Wholly-Owned Subsidiary of American Pacific Corporation

FINANCIAL ISSUES

(Page vii)

- License Agreement Transferring Technology from Pacific Engineering to PEPCON Production at Arm's Length Price, Estimated at a Royalty of $.005 per Pound of Actual Production, Subject to:
  - Independent Fairness Opinion, and
  - Provision Expressly Providing for Adjustment by an arbitrator in the Event Pacific Engineering Should be Adjudicated a Bankrupt if the Royalty is Determined to be Less Than Fair Value

SAFETY PLANS AND STATUS

- Planned Safety Improvements
    - Geographic Separation of Electrolytic, Crystallization, Dryer, Blending and Packing, and Storage Operations as Recommended by Site Investigation Team
    - Retention of Minimum Amounts of AP Required for Blending and Packing Operations in the Vicinity of Those Operations
    - Establishment of Maximum Amounts of Finished AP in Storage at a Storage Location, and Geographic Separations of Finished Product Storage Locations as Recommended by Site Investigation Team
    - Review of All Existing Plant Safety Practices by Site Investigation Team, and Establishment of More Rigorous Standards if Recommended
- Investigation Plan and Status
    - Investigation Under Joint Direction of C. Keith Rooker (PEPCON General Counsel) and Stuart Cotton (Counsel for Insurer)

SAFETY PLANS AND STATUS

(Page ii)

- Site Investigation Team Under Joint Direction of John W. Loosle (Former Morton Thiokol, Inc., Employee and Consultant) and John Gibson (Operating Executive of USX Division)
- Cooperation of Morton Thiokol and Aerojet General Corporation in Providing Experts in Various Specialities, Supported by Experts Engaged by Insurer
- Anticipated Time to Complete Investigation: 1 August - 31 August 1988

SUMMARY

- **AP Production by 1 January 1989**
- **AP Production Without Electrolytic Production Can Probably be Achieved by 1 November 1988**
- **Financial Assistance Required: Government- Guaranteed Contract Assuring Purchase of Minimum of 30,000,000 Million Pounds of AP Per Year Over a 15-Year Period**
- **Pacific Engineering Primary Concerns:**
    - Rapid Rebuilding to Support National AP Requirement, Particularly With Respect to Programs for Which Pacific Engineering Has Been Sole Source, or as to Which Kerr McGee has Inadequate Capacity to Meet All Program Requirements
    - Minimization of Requalification or Recertification Requirements by Replication of Pacific Engineering Manufacturing Process
    - Plant and Personnel Safety

Mr. Roe. The Chair will then recognize Mr. Rooker to make the oral statement.

Mr. Rooker. Thank you, Mr. Chairman.

Mr. Roe. There is a lady here who would like to identify herself for the record.

Ms. Brown. My name is Janice J. Brown. I am with the law firm of Barker, Gillock, Koning, Brown & Early.

Mr. Roe. We did not hear you. Would you move closer to the microphone?

Ms. Brown. Janice J. Brown.

Mr. Roe. Good. Now, we hear you.

Ms. Brown. I am a member of the law firm of Barker, Gillock, Koning, Brown & Early. We have been retained by the insurance carriers on the liability side of it for PEPCON. I should mention to you in case there could be confusion that there are lawyers for the property insurance, also.

Mr. Roe. The Chair recognizes Mr. Rooker.

Mr. Rooker. Thank you. Mr. Chairman and distinguished members of the committee, as representatives of Pacific Engineering we appreciate the opportunity to present testimony to this subcommittee.

I would like to begin with a brief personal note, perhaps to put things in perspective. Mr. Gibson and I were both in the plant at the time of the incident. At the time of the major explosion, Mr. Gibson was some 5 or 600 feet from the center of that explosion and I was some 8 or 900 feet from that explosion. We lost the lives of two of our close friends and co-workers. We saw injuries to a large number of our co-workers and witnessed the remarkable fact that of the 104 people in the plant, all but two escaped with not very serious injury.

I live in Green Valley. I am a neighbor of many of those who have spoken here. I had over $10,000 damage to my home. My wife and children were in the home at the time of the incident. We have the perspective of this incident from, I would offer to you, all of the sides: That of the community, that of the family, that of the employees in our facility and that of the people responsible for the operation. And we feel a high degree of sensitivity in all of those respects.

The subcommittee has requested that we address the following matters today. First, our investigation of the May 4 accident that destroyed our chemical plant, with such insight as we can offer on cause.

Second, descriptions of discussions we have had with NASA and the Department of Defense respecting replacement of the chemical plant. And, third, negotiations with city, county or Federal authorities concerning the location of a new chemical plant.

The portion of the statement that I will deliver addresses these three matters. A second part of the statement that is attached, and you have made part of the record, is substantially the same as but updated from the material presented to the Department of Defense and NASA on the 16th of May at their request.

First, with respect to the investigation and causation. At the threshold, it is critical that certain basic, simple and indisputable facts be noted. First, ammonium perchlorate is an oxidizer that does not burn. Rather, when heated, it provides oxygen to enable other materials that do burn to do so. This is its role in solid propellants.

Second, ammonium perchlorate is not, quote, rocket fuel, close quotes. It is not a fuel at all. As stated, it is an oxidizer that, when heated, provides oxygen to enable the fuel to burn. Any characterization of ammonium perchlorate as rocket fuel or as fuel at all is simply incorrect.

Third, as manufactured, handled and stored at the Pacific Engineering plant, ammonium perchlorate by itself is not capable of explosion or detonation. By this, quite specifically, we mean that in the particle sizes at which we manufacture, handle and store the material, and at the high levels of purity required by the specifications to which we manufacture, ammonium perchlorate not only cannot, by definition, burn, but also cannot, by itself, explode or detonate.

Fourth, there are, unquestionably, certain well known hazards that must be avoided or protected against in the manufacture and handling of ammonium perchlorate. If any fuel is mixed with any oxidizer including, but by no means limited to, ammonium perchlorate, the combination will be hazardous. The more high-energy the fuel, the greater this hazard will be.

In addition, at very small particle sizes not manufactured, handled or stored by Pacific Engineering, ammonium perchlorate, like many other substances, such as wheat flour or corn starch, may be explosive.

Because of these simple and indisputable scientific and physical facts, the investigation and search for the cause of the May 4 incident must necessarily focus on the identification and evaluation of the available source or sources of fuel sufficient to generate the large amounts of energy obviously present from the incident. All potential fuel sources have been and are being examined. The most probable fuel source and the only fuel source known to have been available in sufficient quantities to have provided the evident energy is natural gas.

The plant was traversed by a 16-inch high pressure natural gas line. There is evidence of the presence of a large leak in the area preceding the incident. The search for and evaluation of potential fuel sources continues, but is not expected to develop evidence of any candidate fuel source other than natural gas.

It was apparent to many witnesses whose statements have been taken to the May 4 accident that the initial fire that preceded the explosions was a hydrocarbon fire unrelated to ammonium perchlorate. The fire was first observed in the center of the plant, near a building housing batch processing and drying equipment. Several groups of PEPCON employees attempted unsuccessfully to extinguish the fire with water, a method that will extinguish combustion of a limited fuel supported by oxygen from ammonium perchlorate.

Prior to the first explosions, the fire had the appearance of a blowtorch, according to one close-by eyewitness, emitting from the ground about 60 to 80 feet in height. The first explosions that occurred after these observations were made were aerial explosions unrelated to ammonium perchlorate and required for their origin an energy source entirely independent of ammonium perchlorate. There is extensive evidence of fire emitting from the ground throughout the plant. These facts, and the statements of these and all other witnesses, continue to be evaluated.

In addition, there is an abundance of physical evidence at and around the plant site indicating the presence of natural gas fires at the point of discovery identified above, throughout the plant and at locations removed from the plant where fires were burning from the ground. This evidence also continues to be evaluated.

A parenthetical note. We have previously announced our judgment that this fire in its origin and propagation was a natural gas fire. We have taken pains to state explicitly on each such occasion that that judgment is not accompanied by any assignment of responsibility for the gas leak. We have explicitly stated that it is conceivable the leak may have been attributable to a manufacturing defect in the pipe. The pipe has not yet been excavated and exposed, so we do not yet know the identity of the manufacturer. To a defect in installation in the pipe. We have not yet identified the installer of the pipe. Or to a failure of maintenance of the pipe. At some level that we do not understand, this has been translated or transmogrified into a dispute with Southwest Gas Corporation, a name we have not charged, a claim we have not made and a position we explicitly are not prepared to take at this time and do not know whether we will ever take such a position. PEPCON and its property insurers have engaged a team of independent professional investigators to analyze the origin and propagation of the fire and consequent explosions. This team is led by consultants having extensive experience in the aerospace industry, including, particularly, the handling and processing of ammonium perchlorate and propellants containing ammonium perchlorate and in the investigation of incidents involving such propellants.

This team has made every effort, every effort, to assure that other proper investigating authorities—including particularly the Clark County Fire Department and the Nevada State Occupational—the Office of Occupational Safety and Health—are made aware of the properties of ammonium perchlorate and of all physical and other evidence that will bear on the ultimate determination of cause of origin and propagation.

It is emphatically our wish and that of these investigators—that all investigators, that all investigations be based on evaluation of all material evidence and a complete and substantially comparable course of investigation and lead to the truth.

Thus, we doubt that any reports will be issued until all reports are prepared to be issued. The investigation is being conducted to the extent possible under the limitations resulting from exclusive local fire department site control during the four weeks following the incident and from judicial action designed to preserve evidence in the interest of all parties, in the manner typical of the investigation of similar incidents in the aerospace industry and on government reservations, and is expected to result in a report comparable to the reports issued in such cases. When issued, probably in approximately 60 days, the report will be provided to this subcommittee and we would request that when it has been available, if it is not too late to include it in the record of this hearing that it be so included.

A parenthetical comment with respect to questions previously asked about temporary restraining orders. I know there are attorneys who are members of this committee. Pacific Engineering's liability insurance defense lawyers did indeed seek a temporary restraining order on May 5, 1988. That restraining order was issued. The substance of the request and the substance of the order, which I would be happy to hand to the committee or any member, was to prohibit access to the site except by authorized persons, including government authorities conducting an investigation. That was it as far as that restraining order was concerned.

Two weeks later, a further restraining order was sought and obtained that specifically——

Mr. ROE. Would you—the gentleman suspend for a moment?

Mr. ROOKER. Certainly.

Mr. ROE. I would ask unanimous consent that the report be entered in the record at this point.

Mr. ROOKER. That is the restraining order?

Mr. ROE. The restraining order, yes. A copy of it.

Mr. ROOKER. Both of them. I am, for the record, handing up a copy of an order entered by Judge Miriam Shearing on the 5th day of May 1988.

Mr. ROE. No objection. So ordered.

[Two Court Orders follow:]

FILED

MAY 5 4 52 PM '88

Loretta Bowman
CLERK

LAW OFFICES
BARKER, GILLOCK, KONING, BROWN & EARLEY
A PROFESSIONAL CORPORATION
430 SOUTH THIRD STREET
LAS VEGAS, NEVADA 89101
386-1086

DISTRICT COURT

CLARK COUNTY, NEVADA

In The Matter Of:
THE PACIFIC ENGINEERING AND PRODUCTION OF NEVADA, INC. LITIGATION.

Petitioner.

CASE NO. A264985
DEPT. NO. X
DOCKET K

ORDER

The verified Petition of PACIFIC ENGINEERING AND PRODUCTION OF NEVADA, INC. praying for an Order restricting the access to its place of business and the adjacent Kidd & Company place of business, to preserve evidence therein, having been considered, it appears to the satisfaction of this Court that the Petition comes within the provisions of N.R.C.P. 27(a) and the inherent power of the Court, in that failure to limit access and preserve evidence may prevent a failure or delay of justice. Therefore,

IT IS ORDERED that PACIFIC ENGINEERING AND PRODUCTION OF NEVADA, INC., may restrict access to its place of business, located at 8201 Gibson Road, Henderson, Nevada and the adjacent property of Kidd & Company, to preserve the integrity of the premises to those persons charged with investigating

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events herein described and those authorized by law to enter.

DATED this 5th day of May, 1988

MIRIAM SHEARING
DISTRICT COURT JUDGE

BARKER, GILLOCK, KONING,
BROWN & EARLEY, P.C.

By: Janice J Brown
JANICE J. BROWN, ESQ.
430 South Third Street
Las Vegas, Nevada 89101
(702) 386-1086
ATTORNEYS FOR PETITIONER

DISTRICT COURT

CLARK COUNTY, NEVADA

In The Matter Of:)
)
THE PACIFIC ENGINEERING AND PRODUCTION OF NEVADA, INC. LITIGATION.) CASE NO. A264985
)
) RESTRAINING ORDER
)
Petitioner.)

The Clark County Fire Department and its representatives and consultants are hereby restrained from doing any destructive inspection or testing in and about Pacific Engineering and Production of Nevada, Inc. site until further order of this Court.

IT IS FURTHER ORDERED that the Clark County Fire Department shall appear before this Court on the 16th day of May, 1988, at 4:00 o'clock P.M., in Department No. XIV.

DATED this 13th day of May, 1988, at the hour of 6:10 P.M.

Donald M. Mosley
DISTRICT JUDGE

Submitted by:
BARKER, GILLOCK, KONING,
BROWN & EARLEY, P.C.

BY William Barker
WILLIAM S. BARKER, ESQ.
430 South Third Street
Las Vegas, Nevada 89101

LAW OFFICES
BARKER, GILLOCK, KONING, BROWN & EARLEY
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430 SOUTH THIRD STREET
LAS VEGAS, NEVADA 89101
386-1086

DISTRICT COURT

CLARK COUNTY, NEVADA

In the Matter of)
THE PACIFIC ENGINEERING AND)
PRODUCTION OF NEVADA, INC.)
LITIGATION.)
Petitioner.)

CASE NO. A264985
DEPT. NO. X
DOCKET NO. "K"

EX PARTE MOTION FOR RESTRAINING ORDER

COMES NOW BARKER, GILLOCK, KONING, BROWN & EARLY, P.C., and moves this Court for a Restraining Order to prevent the potential destruction of evidence in this matter until further order of the Court.

This Motion is made and based upon the Affidavit of MICHAEL KONING and E.D.C.R. Rule 2.10(b).

DATED on this 11th day of May, 1988.

BARKER, GILLOCK, KONING,
BROWN & EARLY, P.C.

BY:
WILLIAM S. BARKER, ESQ.
430 South Third Street
Las Vegas, Nevada, 89101
Attorneys For PACIFIC ENGINEERING &
PRODUCTION OF NEVADA, INC.

BARKER, GILLOCK, KONING, BROWN & EARLEY
A PROFESSIONAL CORPORATION
430 SOUTH THIRD STREET
LAS VEGAS, NEVADA 89101
386-1086

AFFIDAVIT OF MICHAEL A. KONING

STATE OF NEVADA)
) SS:
COUNTY OF CLARK)

MICHAEL A. KONING, after being duly sworn, states as follows:

That on the late afternoon of May 13, 1988 your affiant received a telephone call from Attorney Jim Gibson, Jr. advising your affiant that he had been informed that the Clark County Fire Department was going to physically remove the batch dryer from the accident site and wash the surrounding area down.

Your affiant thereafter contacted Deputy District Attorney Mary-Anne Miller, counsel having appeared on behalf of the Clark County Fire Department in meetings before Judge Mosley on the Pacific Engineering matter. Attorney Miller confirmed the Fire Department intentions as set forth in the preceeding paragraph. She further advised that the removal would take place after giving twenty-four (24) hours prior notice to a Pepcon employee. Attorney Miller, on behalf of the Fire Department, could not give any assurances as to when this removal would take place-other than after twenty-four (24) hours notice.

Your affiant has consulted with an investigator retained

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by Pepcon who advises your affiant that such action by the Clark County Fire Department will irreparably destroy certain crucial evidence.

Michael A Koning

MICHAEL A. KONING

SUBSCRIBED AND SWORN to before me on this 13th day of May, 1988.

Kay Sparks

NOTARY PUBLIC

My Commission Expires:

____

[illegible] 17, 1990

Ms. **Brown**. May I note for the record that those are my work notes.

Mr. **Roe**. Those are not the only copies?

Ms. **Brown**. No.

Mr. **Roe**. Those are photocopies?

Ms. **Brown**. Yes. Those are my personal copies.

Mr. **Rooker**. There was a second temporary restraining order issued on the 16th day of May of 1988 at the request of the Barker, Gillock law firm, which was prompted by the imminent threat.

Mr. **Roe**. Give me that again.

Mr. **Rooker**. The 16th day of May, 1988, twelve days after the incident, and eleven days after the first order. The application for that order and the issuance of the order were prompted by the imminent threat that the fire department had articulated that they were going to remove from the site and destructively test a piece of proprietary, highly confidential equipment, without offering any protection to Pacific Engineering with respect to the proprietary character of the equipment and without any provision being made to maintain the evidence in the interests of not only Pacific Engineering but all parties.

That order was entered, and it was promptly followed by a hearing, and the matter was resolved by stipulation. The parties in the stipulation include Mary Anne Miller, the lady whose name you previously heard.

Ultimately, the fire department, after four weeks, relinquished control of the site to Pacific Engineering. And they did so, the judicial record will reflect, at the affirmative request of Ms. Miller made in open court before Judge Donald Mosley. Her request, representing the fire department, was that the fire department be directed to turn over the site to Pacific Engineering.

Since that time, we have endeavored without exception which I am aware, and I believe that I would be aware, to assure that whenever the fire department wished to have access to the site, that they had access to the site.

The investigation that is being conducted will be concluded, and the report will be issued. Until that time, I respectfully submit to the members of the committee, and I would expect that your own experience in reviewing matters of this kind in the aerospace industry and the defense industry previously will coincide with the view that I am about to express, that comments about the details of the investigation beyond the general matters discussed would not be appropriate.

Second, with respect to discussions with NASA and the Department of Defense regarding facility replacement, immediately after the May 4 incident, we solicited a meeting with the appropriate Federal officials. Indeed, I spoke personally, through the intervention of a member of our Congressional delegation, with Secretary Aldridge of the Air Force.[99]

On May 16, we met with representatives of the Air Force and NASA in Washington. Prior to that—a parenthetical note again in response to a comment of the last panel—we went through a period right after this incident when we were desperately concerned about the integrity of the site, the integrity of the evidence, and our ability to preserve our property.

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[99] Hon. Edward Aldridge, Jr., Secretary of the Air Force.

I spoke again with Secretary Aldridge, and I asked him in all seriousness if there was any basis upon which the United States Air Force could come into that and take control of the site to the exclusion of ourselves as the owner and everyone else who might compromise the integrity of the investigation.

After a couple of days, I received word that counsel for the Department had concluded that there was no proper legal basis upon which that the government could take that action, because it is not a facility with respect to which the government has cognizance.

We understand that decision, but we were frustrated by that decision. Because our highest wish would have been that the government take the lead in assuring that the truth would be derived as a result of this investigation. And everything that we have been endeavoring to do is consonant with that objective.

Our purposes in requesting and attending the meeting in Washington on May 16 were three-fold. First, given the limited production capacity for ammonium perchlorate in the United States, we believed then and believe now that there exists a critical national problem in ensuring the supply of ammonium perchlorate. And we wished to provide such information as was available to us regarding the definition and scope of this problem.

Second, given the fact that only two firms have manufactured ammonium perchlorate in the United States since 1965 or 1966, namely Kerr-McGee and PEPCON, we wished to assure the government of our interest and our technical and managerial ability to participate in solving the supply problem, and to present a facility recovery plan for consideration.

Third, given the uncertain financial condition of PEPCON following the accident, and our consequent inability to implement the proposed recovery plan without government support, we wished to discuss the question of whether such support could be made available. And if so, what kinds of support might be available.

Our meeting was with the task group chaired by Daniel S. Rak. We had subsequent telephone discussions with Mr. Rak, Colonel Donald Bush, and General John Slinkard.[100] The task group chaired by Mr. Rak analyzed the scope of the ammonium perchlorate supply problem very quickly, and developed alternative solutions and made its recommendations.

We were not, of course, privy to these deliberations. We were advised that the decisions made as a result of these deliberations included the provision of assistance to replace the production capacity lost in the May 4 accident, that such assistance was to be implemented by NASA, and that NASA would administer these matters through Morton Thiokol under its existing contract for the manufacture of solid rocket boosters for the space shuttle program.

Because the assistance extended will require that 100 percent of the funds for rebuilding the plant be secured from private credit sources, and inasmuch that Pacific Engineering is unable, even with such assistance, to obtain such financing in light of its uncertain circumstances, a new corporation—PEPCON Production, Inc. [PPI]—has been organized to build the new plant.

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[100] Brigadier General John Slinkard, Director for Contracting and Manufacturing Policy, Department of the Air Force.

And PPI has executed a letter agreement with Morton Thiokol and approved by NASA, and is moving forward to secure the required private financing based on government assurances therein provided. We have four such proposals in hand. PPI has selected a contractor-designer that is one of the largest such firms in the United States, and has already validated, in writing, our ability to build a new plant in a six month period.

And PPI has negotiated a contract with that firm that will include assurances that its scheduled recovery date of January 1, 1989 will be met. Our letter agreement with Morton Thiokol approved by NASA obligates us to a February 1 date, and our target is January 1. PPI has evaluated a number of sites, and is in the final stages of the site selection process, and expects to announce its site selection next week. There are three sites now under consideration, including one site in Lincoln County, Nevada, in a very remote area about sixty miles from Las Vegas; one site on the reservation of the Moapa Paiute Indian Tribe in Clark County, Nevada, about forty miles from Las Vegas; and one site in another state.[101]

We anticipate that further discussions with NASA, through Morton Thiokol, will be required to arrange the required private financing, and expect to conclude these matters next week as well.

Engineering and design will commence, based on process engineering that we have now completed, by July 1. Construction is expected to commence prior to July 15th. PPI has, of course, offered to negotiate a labor agreement with the United Steel Workers covering its operations wherever they may be located.

In all of our discussions with NASA and Air Force personnel, they have been most supportive—although it is perfectly clear to us, as I am sure it is to the this committee, that their interests have quite understandably not been in the provision of assistance to us, but has rather been in the assurance of an adequate and reliable ammonium perchlorate supply in the national interest.

Third, with respect to negotiations with city, county, and Federal authorities regarding the location; except as I have described, we have had no negotiations with Federal authorities.

With respect to potential sites, we have had preliminary discussions with local government authorities having jurisdiction, and have received warm support—particularly from the officials of Lincoln County, Nevada, and local officials in the state other than Nevada.

Our discussions with Nevada state officials have generally been limited to matters touching upon their responsibilities for permitting that are not within local control. We have had no contact with officials of other state governments, and believe none to be necessary regarding the potential non-Nevada site.

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[101] Pacific Engineering will build its new production facility at a 4,800 acre site near Cedar City, Utah. The Utah Legislature has voted to authorize industrial revenue bonds as an incentive.

We hope to enjoy the support and cooperation of Nevada state officials equivalent to that expressed by the local officials with whom we have met. Such cooperation and support will be indispensable to our ability to meet our obligations to the government if we are to locate in Nevada.

We are grateful for the opportunity to appear before the committee. We have pledged to the committee, as we have pledged to the Department of Defense and NASA, our maximum efforts to the restoration of this production capacity. And at the appropriate time, we will be pleased to respond to any questions.

Mr. **Roe**. Thank you, Mr. Rooker.

Mr. Hennigan.

STATEMENT OF GEORGE R. HENNIGAN, KERR-McGEE CHEMICAL CORP., HENDERSON, NV

Mr. **Hennigan**. Mr. Chairman and members of the subcommittee, I am George R. Hennigan, executive vice president of Kerr-McGee Chemical Corporation. On my right is Mr. Tom McDaniel, senior vice president of our parent corporation.

Being from Oklahoma, Mr. Chairman, we have a partial appreciation for the length of your day yesterday and this lengthy day as well.

I am director of all chemical operations for Kerr-McGee, including the Henderson, Nevada facility. And on behalf of Kerr-McGee Chemical Corporation, I welcome the opportunity to appear before your committee.

Today I will briefly describe how Kerr-McGee happened to be located in Henderson, Nevada. I will summarize numerous events, activities, and challenges affecting our business following the PEPCON accident, and how we have responded to each one of them.

I would outline Kerr-McGee's plan for the future, talk about our total commitment to safe operations, and to be a good neighbor. I will tell you how Kerr-McGee intends to fulfill our responsibilities to the space program, to the national defense, our customers, our employees, and our neighbors.

Our commitment began 45 years ago during World War II when the government constructed an electrolytic magnesium facility here in Henderson. As you may recall, magnesium had strategic importance in wartime for the aircraft industry.

Following the war, the magnesium facility was sold to private industry. And in 1954, in concert with the United States Navy, our original ammonium perchlorate plant was built in the Henderson site.

Following one of the greatest accomplishments of all time, the landing of an American astronaut on the Moon, and the United States involvement in Vietnam, public sentiment towards the space program began to wane. As a result, the bottom fell out of the ammonium perchlorate market. Manufacturers found themselves with unprofitable plants competing in a small, stagnant market. Most of these companies abandoned the ammonium perchlorate business. And finally, there were only two producers left. Kerr-McGee was one of these. We honored our commitment then, and we will continue to honor our commitment in the future.

Also during these historic years, we diversified the product mix manufactured at Henderson to include sodium chlorate, manganese dioxide, and specialty boron chemicals.

To meet the need of the space and defense effort, the ammonium perchlorate capacity of our plant was expanded in 1982 from 9000 tons to 14,000 tons, and again in 1984 to 18,000 tons, our present annual capacity.

This diversification and expansion generated new employee opportunities over the years and stimulated the local economy. We have 235 employees with an annual payroll of over $6 million. The tax payment to local government totaled nearly $500,000 per year.

We at Kerr-McGee are proud of our past record and look forward to continuing the tradition of support for the local community, our country, national defense, and the space program.

Kerr-McGee is now the sole supplier of ammonium perchlorate to the free world. I assure you that we are acutely aware of the huge responsibility of being in this position. We are not taking this responsibility lightly.

Immediately following the PEPCON accident, we have made recommendations to agencies within the Department of Defense and NASA regarding the ammonium perchlorate supply-demand picture for the present and the immediate future. We briefed these agencies on our production capabilities, and made recommendations on how to receive maximum benefit from existing inventories and how to optimize our output of usable product.

I have traveled to Washington on two occasions to meet personally with government officials. We are working with the government to reach an agreement to expand Kerr-McGee's production of ammonium perchlorate in the near future. This expansion will not be at our Henderson facility.

Several areas are being considered for this, in and out of the State of Nevada. While we have safely produced ammonium perchlorate since 1954, we continue to be aware of the responsibility to the citizens of Nevada and our employees to operate the plant safely. To meet this responsibility, we have been and will continue to be addressing this in our efforts.

I have met twice with Governor Bryan to discuss the safety of the plant. Kerr-McGee officials have met with the mayor of Henderson, the lieutenant-governor, the county commission of Clark County, the fire department and other public officials to discuss safety aspects of our facility. Following the PEPCON accident, Kerr-McGee voluntarily ceased production of ammonium perchlorate while an independent safety inspection team of nationally known experts, appointed by Governor Bryan and Kerr-McGee, thoroughly inspected the plant.

This team made a list of recommendations to improve operations of the plant. We have complied with many of these recommendations, including eight that the experts deemed necessary before restart. We have assigned responsibility to complete those items of a longer nature, and I will personally be following up on their completion.

We recognize the Clark County fire department has full accountability for the fire safety of the public. In extensive discussions, the full range of fire safety issues for our facility were examined. Comprehensive technical and scientific information was provided to the fire department staff. And as a result of our meetings, we have been able to finalize agreements regarding their concerns about the safety of our plant.

Recognizing that the size of ammonium perchlorate inventory is a considerable concern, I have authorized the purchase of an additional blender to significantly increase our ammonium perchlorate blending capacity. This will have a dual effect. Our shipments to customers can be expedited and our inventory at Henderson will thereby be reduced.

Kerr-McGee is also taking a leadership role in expanding the knowledge of the properties of ammonium perchlorate. In the very near future, we will be seeking the cooperation of the Departments of Defense, Transportation, NASA, academia and rocket motor manufacturers to jointly conduct a series of structured tests to verify, on a large scale, safe ammonium perchlorate storage and shipping practices.

In conclusion, we at Kerr-McGee Chemical Corporation, as the sole supplier of ammonium perchlorate, are mindful of its critical strategic value. As we have done for over thirty years, we want to continue to supply this vital material to the nation in a safe and dependable fashion.

Mr. Chairman, this concludes my formal testimony. We welcome the committee's interest and assistance, and will be happy to answer any questions that the committee may have. Thank you.

[The prepared statement of Mr. Hennigan follows:]

STATEMENT OF

GEORGE R. HENNIGAN
Executive Vice-President
KERR-McGEE CHEMICAL CORPORATION

before the

Subcommittee on Investigations and Oversight
House Committee on Science, Space, and Technology
HOUSE OF REPRESENTATIVES

Mr. Chairman and Members of the Subcommittee:

I am George R. Hennigan, Executive Vice President of Kerr-McGee Chemical Corporation. I am director for all of the chemical operations of Kerr-McGee, including the Henderson, Nevada facility. On behalf of Kerr-McGee Chemical Corporation, I welcome the opportunity to appear before your committee.

Today, I will briefly describe how Kerr-McGee happened to be located in Henderson, Nevada. I will summarize numerous events, activities and challenges affecting our business following the PEPCON accident, and how we have responded to each of them. I will outline Kerr-McGee's plan for the future and talk about our total commitment to safe operations and to being a good neighbor. I will tell you how Kerr-McGee intends to fulfill our responsibilities to the space program, the national defense, our customers, our employees and our neighbors.

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Following one of the greatest accomplishments of all times, the landing of an American astronaut on the moon, and the United States' involvement in Vietnam, public sentiment towards the space program began to wane. As a result, the bottom fell out of the ammonium perchlorate market. Manufacturers found themselves with unprofitable plants competing in a small, stagnant market. Most of these companies abandoned the ammonium perchlorate business. Finally, there were only two producers left. Kerr-McGee was one of these. We honored our commitment then, and we will continue to honor our commitment in the future.

Also, during these historic years, we diversified the product mix manufactured at Henderson to include sodium chlorate, manganese dioxide, and specialty boron chemicals. To meet the need of the space and defense effort, the ammonium perchlorate capacity of our plant was expanded in 1982 from 9,000 tons to 14,000 tons and again in 1984 to 18,000 tons, its present annual capacity. This diversification and expansion generated new employee opportunities over the years and stimulated the local economy. We have 235 employees with an annual payroll of over Six Million Dollars. Tax payments to local government total nearly Five Hundred Thousand Dollars per year. We at Kerr-McGee are proud of our past record and look forward to continuing the tradition of support for our country, national defense, and space program.

Kerr-McGee is now the sole supplier of ammonium perchlorate to the free world. I assure you that we are acutely aware of the huge responsibility of being in this position. We are not taking this responsibility lightly.

Immediately following the PEPCON accident, we made recommendations to agencies within the Department of Defense and NASA regarding the supply/demand picture for the present and immediate future. We briefed these agencies on our production capabilities and made recommendations on how to receive maximum benefit from existing inventories and how to optimize our output of a usable product.

I have traveled to Washington on two occasions to meet personally with government officials. We are working with the government to reach an agreement to expand Kerr-McGee's production of ammonium perchlorate in the near future. This expansion will not be at our Henderson facility. Several areas are being considered, both in and out of the State of Nevada.

While we have safely produced ammonium perchlorate since 1954, we continue to be aware of the responsibility to the citizens of Nevada and our employees to operate the plant safely. To meet this responsibility, we have been, and will continue to be, aggressive in our efforts. I have met twice with Governor Bryan to discuss the safety of the plant. Kerr-McGee officials have met with the Mayor of Henderson, the Lt. Governor, the County Commissioner of Clark County, the Fire Department and other public officials to discuss safety aspects of the facility.

Following the PEPCON accident, Kerr-McGee voluntarily ceased production of ammonium perchlorate while an independent safety inspection team of nationally known experts, appointed by Governor Bryan and Kerr-McGee, thoroughly inspected the plant. This team made a list of recommendations to improve operations of the plant. We have complied with many of these recommendations, including eight that the experts deemed necessary before re-start. We have assigned responsibility to complete those of a longer nature, and I will personally be following up on their completion.

We recognize that the Clark County Fire Department has full accountability for the fire safety of the public. In extensive discussions, the full range of fire safety issues for our facility were examined. Comprehensive technical and scientific information was provided to Fire Department Staff, and as a result of our meetings, we have been able to finalize agreements regarding their concerns about the safety of our plant.

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Kerr-McGee is taking a leadership role in expanding the knowledge of the properties of ammonium perchlorate. In the very near future, we will be seeking the cooperation of the Departments of Defense and Transportation, NASA, Academia and rocket motor manufacturers to jointly conduct a series of structured tests to verify, on a large scale, safe ammonium perchlorate storage and shipping practices.

In conclusion, we at Kerr-McGee Chemical Corporation, as the sole supplier of ammonium perchlorate, are mindful of its critical strategic value. As we have done for over 30 years, we want to continue to supply this vital material to the nation in a safe and dependable fashion.

Mr. Chairman, this concludes my formal testimony. We welcome the Committee's interest and assistance. We will be happy to answer any questions that the Committee has.

Mr. Roe. I thank the gentleman for his testimony. In view of the circumstances, in the fact that Mr. Volkmer has to leave shortly because people are flying back to their own respective districts, the Chair would defer its questioning, and call on the distinguished gentleman for Missouri.

Mr. Volkmer. Thank you very much, Mr. Chairman. I appreciate this opportunity. My questions mostly have to do with the PEPCON people.

Ms. Brown, yesterday evening when we met out at PEPCON and the gentleman from Wisconsin specifically asked——

Mr. Roe. Would the gentleman suspend. Ms. Brown has not been sworn. Would you stand and raise your right hand, please.

[Whereupon, Ms. Brown was duly sworn.]

Mr. Roe. The gentleman from Missouri.

Mr. Volkmer. There were questions from the gentleman from Wisconsin, Mr. Sensenbrenner—addressed basically to the assistant fire chief from Clark County, if you remember—with regard to the filing of the lawsuit, and to whom was the first injunction issued.

Ms. Brown. I recall the question to him. I also recall indicating that it was to us, the first order.

Mr. Volkmer. Well, that is not the way that most of us remembered it. I wish that we had had a reporter there.

I would like to ask Mr. Rooker. Throughout your testimony, and from statements that I have read previously, that it is PEPCON's position that the natural gas was really the fuel culprit in causing the fire and explosions that occurred on May 4th; is that correct?

Mr. Rooker. That is correct, sir.

Mr. Volkmer. You are going to be in a heck of a shape if it was not, are you not?

Mr. Rooker. Excuse me.

Mr. Volkmer. You are going to be in a heck of a shape if it was not.

Mr. Rooker. I am not sure that I understand the gentleman's question.

Mr. Volkmer. Well, liability-wise, you are resting your whole case on natural gas—natural gas being the culprit. There is no question in my mind about that. And if it is not the culprit, and there was not anything wrong with the natural gas pipeline and there was not any natural gas leak, you are up a creek, as we say in Missouri.

Mr. Rooker. It depends, sir, on what other factors may be present, and we certainly would have been incorrect in that respect.

Mr. Volkmer. All right. Now natural gas, if it was present and if there was a leak, and it is mixed with the ammonium perchlorate, it becomes a very volatile fuel, correct?

Mr. Rooker. The combination would be very hazardous; yes, sir.

Mr. Volkmer. All right. But what has to cause it to fire?

Mr. Rooker. My understanding, sir, is that in the presence of large amounts of natural gas in the atmosphere, the question of source of ignition is almost irrelevant. By that I mean that static electricity occurring between air and a mass of natural gas or other flammable vapor is sufficient to auto-ignite that mass. A spark from an operating motor is obviously sufficient. A scuff of a shoe would be sufficient.

Under circumstances where large quantities of a highly flammable vapor are present, unexpectedly and contrary to design, the number of potential ignition sources becomes almost innumerable.

Mr. VOLKMER. Now how many fires have you had in the plant in the last two years?

Mr. ROOKER. Let me see if Mr. Gibson can answer that. I do not know.

Mr. GIBSON. I suspect that neither one of us knows.

Mr. VOLKMER. You did not keep any record of fires in this plant?

Mr. GIBSON. I think that we should explain that, normally in an ammonium perchlorate plant fire—at least in our experience—it is over almost the instant that it starts. It is a very quick happening event.

Mr. VOLKMER. It is not a huge fire that engulfs a room this size as soon as it happens, is it?

Mr. ROOKER. That has never happened.

Mr. GIBSON. No, no.

Mr. VOLKMER. Is it a small fire that would—just may be two foot high?

Mr. GIBSON. Let me just say that in thirty years of operation that we have had no claims for fire damage, except electrical fires that were a malfunction of a switching gear. At least that is my best recollection. But normally, an ammonium perchlorate fire is not much different than a sodium chlorate fire is. You mix either one with an organic, and it is ignited, and it is a very hot, fast fire that is over almost instantly.

I am quite certain that the ones that have occurred in our facility were over before anyone could make a call to the fire department or anyone else.

Mr. VOLKMER. You process and make the sodium chlorate right there at your plant?

Mr. GIBSON. We make sodium chlorate. We do not crystallize it or dry it.

Mr. VOLKMER. I did not ask that, but you did make it?

Mr. GIBSON. Yes, we did make it.

Mr. VOLKMER. For the process of making ammonium perchlorate?

Mr. GIBSON. That is correct, yes.

Mr. VOLKMER. Is hydrogen a byproduct of sodium chlorate?

Mr. GIBSON. I am sorry.

Mr. VOLKMER. Is hydrogen a byproduct?

Mr. GIBSON. Yes, hydrogen is a byproduct of the electrolytic production of sodium chlorate.

Mr. VOLKMER. What do you do with the hydrogen byproduct?

Mr. GIBSON. The hydrogen byproduction was vented to the air. It was first scrubbed to remove any contamination of particulate matter, and then it was vented to the atmosphere.

Mr. VOLKMER. Is hydrogen highly volatile when mixed with AP?

Mr. GIBSON. When mixed with AP?

Mr. VOLKMER. Yes.

Mr. GIBSON. I would guess so. I do not know.

Mr. VOLKMER. Oh, come on now—be honest. You know darn good and well it would be. Any fuel mixed with AP that has a very low ignition point is going to be highly volatile. And hydrogen has a very low ignition point.

Mr. GIBSON. That is correct.

Mr. VOLKMER. And if I put it with AP, an oxidizer, it is going to go just like that, is it not?

Mr. GIBSON. That is correct.

Mr. VOLKMER. So you have got hydrogen in that plant.

Mr. GIBSON. We had hydrogen vented to the air. There was hydrogen. I guess that I missed your connection, because there was no way of connecting hydrogen and ammonium perchlorate. They were separated by a substantial distance. The hydrogen was vented at roof level fourteen or fifteen feet above the ground. And, surely, one of the other qualities of hydrogen is that it is lighter than air.

Mr. VOLKMER. It may or may not be, but it was just a question that I had about it. In other words, what I am trying to get it is, as far as I am concerned, seeing your process is that natural gas is not the only fuel that is around.

And the other thing that bothers me about your description of the causation of natural gas in the big explosion is that the way that I remember reading the accounts of your employees at the dry batch plant, the batch area or drying area, was that they first started to put it out with hoses and could not put it out. And then you had an explosion, and it blew out the side of the wall.

Is that not correct?

Mr. GIBSON. That, I think, was the third group, Mr. Volkmer, who tried to put the fire out, and not the first.

Mr. VOLKMER. The first group did not try to put the fire out?

Mr. GIBSON. There were three groups that attempted to put the fire out, in sequence, separate from one other. The third group is the group that provided the statements to which you referred.

Mr. VOLKMER. The first group, did they try to put the fire out?

Mr. GIBSON. They were not able to put the fire out.

Mr. VOLKMER. I said did they try to put the fire out?

Mr. GIBSON. Yes, they did.

Mr. VOLKMER. I did not ask if they did.

Mr. GIBSON. I am sorry.

Mr. VOLKMER. Did they try to put the fire out?

Mr. GIBSON. Yes, they did.

Mr. VOLKMER. And how big was that fire?

Mr. GIBSON. Excuse me.

Mr. VOLKMER. How big was that fire?

Mr. GIBSON. That is the fire that was characterized as having a blowtorch appear 60 to 80 feet in the air.

Mr. VOLKMER. The last question that I have in regard to the lawsuit—in the second injunction—with regard to the fire department, is again to that batch dryer.

Where is that batch dryer at this time, right now?

Ms. BROWN. It is still on the property. It has not been removed.

Mr. VOLKMER. It has not been removed, and not any testing of it at all by anyone?

Ms. Brown. It is my understanding, and please correct me, that they decided that they would take the motors off of the batch dryer, and that the batch dryer has not since been requested.

Mr. Volkmer. They took the motors off, and the motors have been taken off for testing?

Ms. Brown. *Correct me if I am wrong.*

Mr. Rooker. Let me add to that, if I may, Mr. Volkmer. The fire department removed the motors, and the fire department also removed the feeding mechanism that fed the batch dryer from the top.

Mr. Volkmer. All right.

Mr. Rooker. I think that it is worth you knowing that the batch dryer, immediately after the accident, was and still remains about one-third full of ammonium perchlorate. And it shows no evidence of thermal decomposition, obviously, or it would not be there.

Mr. Volkmer. All right. Thank you very much.

Thank you, Mr. Chairman.

Mr. Roe. The Chair recognizes the gentleman from California.

Mr. Konnyu. Mr. Rooker, how much liability insurance do you folks carry?

Mr. Rooker. We had one billion dollars in liability insurance in effect at the time of the incident.

Mr. Konnyu. Now I do not know about your corporate structure.

Mr. Rooker. We would be happy to talk to you about it.

Mr. Konnyu. Are you owned by some other corporation?

Mr. Rooker. There is a public corporation called American Pacific Corporation that conducts our business operations. It is a holding company. It has two wholly-owned subsidiaries. One is Pacific Engineering, and the other is a company called Ampac Development Company, which is the owner of the land adjacent to the chemical plant and the developer of the property under the name of Gibson Business Park.

The chemical operations in Pacific Engineering accounted for 87 percent of the company's consolidated revenues and 92 percent of the company's consolidated earnings in 1987. So the balance of the operations were de minimis in comparison with the chemical operations.

Mr. Konnyu. Did your company have business interruption insurance?

Mr. Rooker. Yes.

Mr. Konnyu. Is that still alive today?

Mr. Rooker. It is a little more complex than that. Our insurance carrier was kind enough to loan to us $2 million against the unencumbered portion of the insurance, without segregating that as to which coverage it related to.

Mr. Konnyu. Could you translate that into English for me, please?

Mr. Rooker. Our fire insurance carrier, which also had the business interruption coverage, loaned us $2 million.

Mr. Konnyu. Can you go on, given all of the lawsuits that are pending—and I recognize that you can get another new separate corporation, et cetera?

Mr. Rooker. The answer is, in my judgment, an unequivocal yes. Pacific Engineering will pay its debt. It will have substantial cash remaining. It our intent and, we believe, our obligation not to mix that cash that remains with the new operation for reasons that I expect are obvious to members of this committee.

In order to preserve the integrity of the new operation, and protect the investment of the banker and NASA in the form of its guarantee that it will make, it is important that it be a standalone, new operation unfettered by links with the past. And that is the manner that it has been established and the manner in which it will be operated.

It is certainly true. I have been a trial lawyer for 23 years, and I have tried a lot of cases, and I know how trials develop and how cases get filed. And we will be sued, and we will sue. And that is without regard to the outcome of the investigation. That litigation, in my judgment, will require at least seven years for resolution and probably longer.

We think that the country does not have seven years, and we do not think that we have seven years, if we are going to be part of the solution to the problem instead of part of the problem.

So it is our intent to take Pacific Engineering and put it here, maintain its asset base as it is and as it was, and protect those assets for the benefit of creditors—whoever they may be—and proceed to sue and assert our uninsured loss claim, and defend litigation as we may be required to do. And at the same time, through the new organization, to proceed with the operation of the business.

Mr. KONNYU. Now given that the existing management is, of course, responsible for the unfortunate incident in the sense that the buck stops at the top in any company, why is there any interest for that management go on to create a new corporation? A lot of people were really hurt bad—you have heard testimony today—who suffered a lot. And even the folks who do not know that they suffered—that is, that they do not know the value of the house, because they happen to live in Henderson right now.

How can you make those folks whole, given your lack of adequate insurance?

Mr. ROOKER. Given the fact that we shared in their losses to a very substantial degree, personally as well as financially, that is an important question to us. We do not think that we cannot be helpful hiding under a rock. We think that if we are to be helpful and be a part of the community that it is our obligation to try to go forward. It is our obligation to pursue the consequences of that incident to their conclusion wherever the truth may take us. And at the same time, to try to build and rebuild a viable business.

And we would like to do that in southern Nevada and we would like to do that with our former employees. We would like to keep the jobs for them, because they are our most important asset.

Mr. KONNYU. In other words, you are saying that despite the sad incident that life must go on?

Mr. ROOKER. Life does go on, I think, and one has to choose.

Mr. KONNYU. I mean your company's life and the things that you have done.

If you choose to build a new plant—and presumably you will—how much would it cost in the financing of it? You touched on it, but if you could explain that a little bit.

Mr. ROOKER. The supplementary material that is with our statement includes a reasonably detailed breakdown of our estimate of the costs. Our current estimate is $33 million exclusive of land costs, but including the necessary infrastructure. We recognized very early that it was not going to be feasible, for all kinds of obvious reasons, to rebuild in the former location. We announced the Saturday after the incident that if we rebuilt that it would be at a different location.

So we will lose the underground utilities and the concrete pads, all of those things that are normally not covered by insurance anyway. Those will have to be replaced at a new location. $33 million is the total that we now estimate.

Mr. KONNYU. Thank you, Mr. Chairman.

Mr. ROE. I thank the gentleman from California.

Let me build on that a little bit. First of all, Mr. Rooker, see if you can tell us about where do your employees stand now, what is the situation? You mentioned, and I agree with you, that it is not the machines, and the widgets and the gadgets, but it is the human beings who run these operations that make it work in the first place. And I know that Mr. Gibson has great respect for that position.

But if you are building a new plant—and you have given the options that you are pursuing at the moment—how does that affect the employees that remain; are they still on your payroll by the way, or what is happening there?

Mr. ROOKER. A number of the hourly employees are in a layoff condition. We had sixty employees who were salaried and sixty who were hourly at the time of the incident. It just happened to be equal. The hourly workers are covered by a collective bargaining agreement between the company and the United Steel Workers local here.

The company was not able to make payroll for any of its people for a substantial period of time after the incident, when we received the loan from the insurance company. We were able to pay the hourly workers through the end of the week of the incident, and pay them their accumulated vacation pay and other benefits.

Mr. ROE. Has that been achieved?

Mr. ROOKER. That has been achieved. And they were placed in a layoff condition pursuant to the provisions of the collective bargaining agreement. The salaried workers, with the exception of two, have remained at work. They are essentially in the design—that I described before—and process engineering of the new plant, as well as the ongoing management of the operation.

In addition to that, we had a separate business activity, coming under the general heading of pollution abatement equipment devices, that was conducted at the chemical plant, just because everything was together. We felt it a matter of urgent priority to get that business recommenced and we have done so, and six of our hourly employees thus far have been brought back onto active status in that business, and we anticipate that there will be more. We are anxious to have that business up and running at full speed as soon as possible, because that will absorb as many as possible, but surely less than all of those hourly workers.

One of the principal reasons that we are anxious to move as rapidly as we possibly can in the rebuilding process is because we recognize that, as more time goes by, that the more difficult it is going to be for us to obtain employees who have to find work and who have to feed their families.

Mr. ROE. Is it the intent of your corporation, in your action, to give them the first priority as far as being rehired is concerned, whether you relocate in Nevada or some other place?

Mr. ROOKER. Yes.

Mr. ROE. They would get priority in the positions?

Mr. ROOKER. Yes.

Mr. ROE. Let me ask you this. Or let me switch over for a little bit to Mr. Hennigan. Let me digress. It seems to me as we come to the conclusion—at least to this part of our observations and hearing—that there has been a lot of goodwill that has been basically manifested, in my judgment, by everybody after we got over the emotional shock of the issues and the concerns which are legitimate. And we talked to FEMA, and FEMA begins to talk to the city, and the city begins to talk to FEMA, and people start to get organized, and we start to make a little bit of sense. And I think that is true.

The thought occurs to me, however, that there ought to be some methodology that we could additionally devise that would help, particularly some of the manufacturers that are involved, as was testified to here before. They have just no place to go.

As bad as your situation is, which I respect and understand, looking to rehabilitate and because of the needs, the national needs, and government concern and so forth and so on, it takes on a different complexion, as those folks have testified, and I am sure that all of the business people understand that.

But it puzzles me, and I will tell you what puzzles me. When we had our big flood problems in northern New Jersey—which I represent—the Passaic River, we had like $150 million worth of damage. It was not just the idea of windows being popped out or doors, or maybe a structural door jamb there, but people's houses literally floated down the river, literally and figuratively.

So having said that, I can empathize with the people who have testified that the concern, and particularly the unknown of what really happened, did not know that it was PEPCON that was blowing up—anything could have happened, you can understand that.

But it seems to me—and we established a good neighbor fund. Maybe this is trite and maybe this is silly, but we did it. And we raised about a quarter of a million dollars from the different people in the area. And we provided those funds immediately, up front, to be helpful to the people who had no other place to turn, such as some folks who have testified here today that whatever the reason—the lady who built her house, that she did not have any insurance, maybe could not get to getting the insurance. The damage, instead of being $3,000, is $7,000, but that would make her whole.

The lady who testified in reference to her company—one building blew up, and the other one she lost her customer, and therefore she is about to lose all of her life's efforts and so forth and so on.

For the want of a nail, the shoe is lost. A good neighbor fund, we called it the good neighbor flood fund.

The other thought that occurred to me is why could we not get together with the banks of the area and with the state government and come back in and establish an economic development revolving account?

In our state of New Jersey, we have an economic development revolving account, where we have problems of this nature, that people are given help. It is not that you do not pay them back. You pay back. But it is a source of resources for them to move.

Maybe I am not as articulate as I would like to be, but I was trying to get that across to NASA today and to DOD. As important as it is—without being too redundant, as important as it is for the government and the other 260 million people, understanding how important ammonium perchlorate is for the security of this country and for our space program, by the same token it is not fair that somebody else gets destroyed in the process. I mean, we are not blaming anybody.

Do you understand what I am trying to say?

Mr. ROOKER. If I may, Mr. Chairman, let me make a couple of responsive comments. The fund, like in New Jersey, was started here. And we have made a contribution, a rather substantial contribution to that fund given our limited resources at the moment, and others have as well. I do not know the magnitude of that fund, nor do I know who the beneficiaries of that fund have been. It has been managed, I think, primarily by the United Steel Workers. But that has been initiated and certainly should be further pursued.

Banks in the area offered help to those who were adversely affected. And I do not know to what extent that was taken advantage of or how successfully it worked. But the banks did extend that kind of offer to persons who were adversely affected by this incident.

Mr. ROE. It seems to me that if I were a good neighbor and a good citizen, and I were the only producer of ammonium perchlorate in the nation, and I were the other producer trying to get back into the business—where the folks of the country are going to be spending $70, $80, $100 million, why could we not in that process—and NASA took the point of view, and I understand where they are coming from, I pressed them rather hard—deliberately—they are coming back and saying, "hey, look, we cannot get in the forefront of the issue as it relates to the liability exposure and whatever, and we have contractual agreements with Thiokol to handle that."

And I am sure that both Mr. Hennigan, Mr. Gibson, Mr. Rooker, Mr. McDaniel, and Ms. Smith know where I am coming from. This committee is not just here to listen. This committee is to figure out what is happening, and it is going to do something about it for sure.

Now it seems to me that—why can we not figure out in this settlement that we are trying to make to keep Kerr-McGee functioning in this particular community, where it is providing opportunity and the safety factors that we are talking about in support of this country—and it is also important to the people here. So that it is a good solid neighbor relationship that exists.

Hopefully, that the commercial space program will progress so that we need an additional Kerr-McGee plant and that we need an additional PEPCON plant, which we are going to need in my judgment in this country in any case.

Why cannot the two companies that are involved negotiating with Thiokol, in view of the fact that DOD and NASA absolve themselves from being up front in this, why cannot the two companies, from a very good neighbor point of view, looking to the overall picture, think about setting up or establishing an economic development revolving fund? Not to give away $2 million. That is not the point that I am making at all. I do not want you to do that. That would be self-defeating.

So I would like you, if you would—which would please this committee to no end—if you entrepreneurs could say, "here is what we are trying to do in a resolution of the matter to the country." We understand the patriotism, and people understand it. Is there some methodology that could be devised with the initiative of the two companies involved, together with Thiokol—which I intend to talk with by the way—to see if there is some idea that could emerge there, that at least would give us a modest economic development or revolving fund, where it could help a few of these companies over the hurdle until either FEMA makes its mind up or we can figure some other resolution?

Does that have any merit, or do you think that it is worth looking into? Mr. Hennigan.

Mr. HENNIGAN. Mr. Chairman, in the spirit of cooperation, Kerr-McGee is willing and has an open mind to consider anything of this nature. We would be most happy to discuss this with the PEPCON Corporation or new PPI.

Mr. ROE. Would that be satisfactory?

Mr. ROOKER. It certainly would be, Mr. Chairman.

Mr. ROE. And if I could take that as a commitment, in the sense of reviewing it to see the probability or possibility, then we would perhaps jointly discuss this with Thiokol to see how that fits into the whole relationship, if that makes some kind of sense.

Does the gentleman from Nevada have any questions?

Mr. BILBRAY. Thank you, Mr. Chairman.

This is for Kerr-McGee mainly, Mr. Hennigan or Mr. McDaniel. Of course, we viewed your plants. And of course, I am not a scientist or engineer. So I do not quite understand how you do what you do.

But between Kerr-McGee and PEPCON, are the processes basically the same processes?

Mr. HENNIGAN. Mr. Bilbray, PEPCON was a competitor of ours. They have some technology that is proprietary, and we have some proprietary technology. And I can truthfully tell you that I do not know the answer to that question. I am not familiar whatsoever with their operations.

Mr. BILBRAY. So we have several possibilities of what caused the PEPCON problem.

From the evidence that we took yesterday and the observation, you do not have a major gas line running through your property, is that correct?

Mr. HENNIGAN. That is partially correct. The same line, I am told, that runs through the PEPCON property runs through a portion of our property, far removed up by Lake Mead Drive, fully a mile or so from our plant.

Mr. BILBRAY. Where the chemical is being mixed together or being processed, is that correct?

Mr. HENNIGAN. That is correct. But in the true sense of the answer to your question; yes, it does go through our property, but nowhere near where our manufacturing facilities are.

Mr. BILBRAY. How about the hydrogen that is created; do you create hydrogen in your process, too?

Mr. HENNIGAN. At this point in time, the hydrogen evolves free to the atmosphere and is not collected.

Mr. BILBRAY. Are you familiar with their process in that sense, how their hydrogen is going?

Mr. HENNIGAN. I am not.

Mr. BILBRAY. Does anyone know whether or not we have a similarity between the two systems, or does PEPCON also not know whether or not they are similar to Kerr-McGee? Mr. Gibson.

Mr. GIBSON. I think that my situation is a little different, since I was involved at the first company—Western Electric Chemical Company that is now Kerr-McGee, and was involved in the design of the first ammonium perchlorate plant, and worked around the electrolytic cells. There is a difference in the process.

Basically, though, particularly in the electrolytic section, the process is the same. The kinds of electrolytic devices are different. But I really think that is immaterial.

Mr. BILBRAY. Mr. Gibson, you probably saw this article that has been in circulation in the Valley, of course.

Mr. GIBSON. One of my favorites.

Mr. BILBRAY. Yes, I am sure. On page 26, it brings up questions that, "According to the county building inspectors and assisting state occupational, safety and health inspectors, they determined in 1983 that unsafe levels of hydrogen being at an explosive range existed at the plant."

Do you know anything about a report like that?

Mr. GIBSON. Well, I do. And that is incorrect. I should start over. There was an allegation made by an employee, anonymous as those things are usually done, that there was fugitive hydrogen present in a sump area. And there was a great deal of conferring and meeting with respect to that allegation. We had a very difficult time trying to prove to everybody what most schoolboys know, and that is that hydrogen is lighter than air, and that it would be very difficult for hydrogen discharged fifteen feet above the ground to go through a sump area. But that was the allegation. And everything that came later was a result of that original allegation, that hydrogen indeed was heavier than air.

Mr. BILBRAY. Has Kerr-McGee had any allegations or any, even anonymous, allegations of any existing hydrogen accumulation at Kerr-McGee's plant here?

Mr. HENNIGAN. Not that we are aware of.

Mr. BILBRAY. When was this gas line put in; was it after PEPCON was built or before it was built?

Mr. ROOKER. It was before, Congressman Bilbray. Our best information is that the gas line was installed in 1956. The Pacific Engineering plant was begun in 1958.

If I may add one comment about your questions about hydrogen. The working hypothesis of the complaint that hydrogen went up out the roof and then dropped back down into the sump area about thirty feet was never accepted by OSHA for reasons that I suspect are fairly obvious.

Mr. BILBRAY. So what you are saying is that the report saying that the county inspectors found this is incorrect, that there was never any inspection that ever found any accumulation of hydrogen, that it was an anonymous report that came in that stated that hydrogen had accumulated. And the county and state inspectors came out with OSHA, and they inspected and never found any accumulation of hydrogen.

Mr. ROOKER. That is consistent with my understanding of the entire event. I think that the newspaper account would be more correct, if it said that a claim was made in a complaint to this effect.

Mr. BILBRAY. I see. I think that this is part of the problem that we have, the fact of all sorts of reports coming in and circulating of violations that have purportedly taken place over a number of years. And at this point, I understand that there is no substantiation that those complaints are correct.

Mr. ROOKER. That is generally true. I am sure, Congressman Bilbray, that you are more aware than the other members of the committee about the fuss that we had about the release of the OSHA records. That was a real lightning rod and drew a lot of attention. Ultimately, they were released. And my best recollection is that from the day that they were released that we heard no more about it, which I think speaks volumes for the contents of those records probably a good deal more than I could ever say.

Mr. BILBRAY. Like the lady and the tiger.

Mr. ROOKER. I will offer one gratuitous comment. And that is Pacific Engineering was always extremely proud of its relationship with the state OSHA and with the local fire department. We met after this incident with a couple of the members of the county commission and representatives of the fire department, who advised correctly. The members of the county commission and Pacific Engineering, at its expense, trained over 150 of the members of the county fire department in the characteristics of ammonium perchlorate and how to deal with the fire that involves ammonium perchlorate as well as general issues of fire in industrial settings.

We called OSHA into our plant, at our initiative, as a consultant. That is another source of misinformation. You have heard the charge that somebody told us when OSHA was coming. The source of that charge is undoubtedly the fact that we invited them. And, obviously, when we invited them, they knew when they were coming. But they also did their job and came unannounced with regularity or irregularity.

And our relationship with them was an excellent working relationship. We found them highly professional, and we hope they found us the same.

Mr. Bilbray. Hopefully, what I am going to try to urge the committee to do, and hopefully they will, is to make land available somewhere within a reasonable distance from the Henderson area for relocation for plants that are deemed to be of some sort of a safety nature, and especially that are involved in the national defense effort. This is mainly for Kerr-McGee.

If land were made available nearby to Henderson, and I do not know where that would be within thirty or forty miles, plus the state would be willing to go in and ask the voters to vote in tax incentives for companies that would relocate such as exemption from property taxes for a period of time, would Kerr-McGee be interested in that sort of thing? I know that PEPCON would, I am sure.

Mr. Hennigan. As I said earlier, Kerr-McGee has an open mind, and we certainly would be interested in talking along any of those lines.

Mr. Bilbray. We will have more meetings. My Chairman is already given me notices that I have talked too long.

Mr. Roe. No, no. You are talking very well.

Well, we want to thank you very much. I have a couple more points that I just want to make for the record.

And for the record, Mr. Hennigan, representing Kerr-McGee, in spite of this tragedy that we have been faced with—and we want to offer our high condolences on the loss of the two people who were involved and were very close friends as we know and citizens in the PEPCON operation—how has this in your judgment reflected on some of your work in this rehabilitation work and safety work that you are doing in your own operation?

Mr. Hennigan. I am sorry, sir, I did not hear the last of the question.

Mr. Roe. We just wanted to get on the record that, in view of this accident situation which has had the whole nation taking a re—review on it—and I am talking about NASA and DOD, the committees, yourself, and so forth and so on. I mean this has helped stimulate—and I know that you have been doing a lot of improvement in your safety areas and so forth.

As a result of that, are you seeing that these are things that you are accomplishing, too, to further enhance your situation?

Mr. Hennigan. Our employees have been extremely supportive. I think that they have been quoted several times in the press as making comments that were very supportive. One of the comments that just comes to mind, I think, yesterday when the press was going through, they stopped one of the employees in the AP plant, and asked how the individual felt. And I think that the response was that, "I feel as safe as if I were in my mother's arms." So they have been extremely supportive.

Mr. Roe. Well, we want to thank all of the present witnesses for their testimony, and all of the witnesses who testified earlier today. It has been a long day from 8 a.m. to 4 p.m. or thereabouts, 4:35 p.m. I think that it has been productive as far as the committee is concerned, and I think that we have all learned a great deal. And I want to thank the Mayor and the council people for having us and the courtesies that have been extended to the committee.

We are hoping that we will look into these matters and the relationship between FEMA and the city to get those cases cleared up.

And we are hoping that you, Mr. Hennigan, and Mr. Rooker with Mr. Gibson, will look into the idea of a revolving account for some kind of help here. And then we will continue on from there. We want to thank you very much for your testimony. We thank all of the people from Henderson.

And I will ask the committee for unanimous consent that the record remain open for two weeks, until July 8th, so that all of the appropriate requests for inclusions of testimony or evidence can be honored. If there is no objection, so ordered.

The committee thanks you for your attention and your participation. The committee stands adjourned.

[Whereupon, the subcommittee adjourned, subject to the call of the Chair.]

APPENDIX I

ADDITIONAL STATEMENTS SUBMITTED FOR THE RECORD

COMMITTEE STATEMENT
By Rep. Joel Hefley
(R-5th-Colorado)
Member, Space Science & Application Subcommittee
June 24, 1988

MR. CHAIRMAN: These hearings on the May 4 explosion of the Pacific Engineering and Production Co. plant in Henderson, Nev. have convinced me we're on the right track to restoring our nation's supply of ammonium perchlorate.

At the same time, I don't believe we should ignore the larger lesson of this accident, that being the realization that our nation's aerospace industry has developed a dependence on solid-fueled rockets requiring ammonium perchlorate, or AP, as it is more commonly known.

The news media and even some committee members will first wonder how this accident will affect the space shuttle program and that is natural. The shuttle is the aerospace industry's most visible product.

But the backup material for the June 8 hearing listed 47 defense and aerospace projects which use solid fuels, all requiring ammonium perchlorate. These ranged from strategic and tactical missiles to ejection seats.

As the members of this subcommittee have pointed out, it makes little sense to place two factories which produce all of the nation's supply of this important chemical two-and-one-half miles away from each other. From a defensive standpoint, this is ludicrous.

(more)

Also, most of the players in our nation's nascent commercial launch industry will also rely on solid fuels and loss of those fuels at this stage of the game could be disastrous. From a somewhat parochial standpoint, I cringed to see that Martin-Marietta's commercial Titan division could have faced bankruptcy if it had to forfeit penalties for failing to launch payloads. The prospective impact on my state, Colorado, might be profound. And the state's other rocket producer, McDonnell-Douglas, likewise relies on solid fuels to boost its Delta.

I admitted sounding parochial but the nation's aerospace industry extends across the nation. Too many accidents like that at Henderson could have wide-ranging consequences we'd rather not think about, consequences like bankruptcies, lay-offs and unemployment.

Naturally, the nation's capacity for ammonium perchlorate should be restored, preferably at more dispersed locations. But in the longer term, I believe NASA and the Department of Defense should begin to examine alternatives to solid fuels. To that end, I would like to see both NASA and the Defense Department prepare a study of such alternatives and present their report to members of the House Science, Space and Technology Committee by Dec. 31, 1988.

In line with this study, NASA should pursue its examination

(more)

of liquid-fueled boosters for the space shuttle, the results of which might improve shuttle safety and could perhaps be applied to similar boosters for Air Force Titans. I noted with interest that the European Ariane IV, launched last week from Guyana, uses a mix of liquid and solid boosters dependent upon the mission.

Second, both NASA and DOD should conduct their study of an advanced launch system with our current dependence on ammonium perchlorate in mind. Presumably, the rockets they suggest could require even more AP than today's shuttle. An attitude of conserving this resource should take root early.

Lastly, both NASA and DOD should examine other solid-propulsion technologies, such as "hybrids" and other possible oxidizers for solid rockets besides AP.

When the Challenger exploded more than two years ago, it exposed the error of relying on one launch vehicle to carry the U.S. space program. NASA, the defense department and this Congress have moved to correct that error by working toward a mixed fleet comprised of the space shuttle and expendable launch vehicles.

I believe the accident in Henderson, Nev. reveals a similar, though more pernicious dependence. For years, solids were viewed as simple and reliable and evolved from boosting jet warplanes to powering the shuttle. At the time, it seemed so logical. Now,

(more)

it seems open to question.

If this nation truly wishes to move toward a mixed, flexible launch capacity, it should begin examining ways of mixing its fuel and propulsion use as well. The situation as it exists makes neither strategic or business sense.

-30-

BRUCE L. WOODBURY
Commissioner

Board of County Commissioners
CLARK COUNTY BRIDGER BUILDING
225 BRIDGER AVENUE
LAS VEGAS, NEVADA 89155
(702) 455-3500

June 29, 1988

The Honorable Robert A. Roe
Chairman of the House Committee on
  Science, Space and Technology
Suite 2321
Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman:

I deeply appreciate the opportunity to provide additional testimony for your Subcommittee on Investigations and Oversight examination of the tragic destruction of the Pacific Engineering and Production Company (PEPCON) and Kidd Marshmallow Company plants in Clark County. Your invitation to testify arrived on the Monday following your meeting in Henderson. I'm pleased you chose to keep the record open to enable me to contribute.

As background, PEPCON, Kidd, and neighboring plants including Kerr-McGee, our nation's only other domestic source of ammonium perchlorate, are located on the site of a 3,700-acre island of unincorporated Clark County which, over the years, has been surrounded by the City of Henderson. Thus, the Clark County Fire Department was the lead responding agency on May 4, and as such is also charged with determining the cause of the fires and explosions which occurred.

To date, Clark County agencies have incurred approximately $150,000 in expenses relating to the PEPCON incident. The bulk of these costs relate to fire suppression and investigation activities and supplies.

I know you are as eager to know the cause of the disaster as those of us in Southern Nevada. The County has hired experts to assist its fire investigation team. While some delays have resulted from various legal actions, our team has pursued a diligent and responsible course of action in gathering evidence. At this writing, additional testing must be completed. When the results are known, they will be provided to your Subcommittee immediately.

This incident has brought to the fore the need local governments have for extensive information on what types of chemicals and other materials, hazardous and non-hazardous, are manufactured, housed and transported within our communities. The federal government is a partner in this effort as evidenced by the passage of national legislation, namely the Emergency Planning and Community Right-to-Know Act of 1986, Title III of the Superfund Amendments and Reauthorization Act.

The State and local responses to these recent laws and regulations are in their infancy but show promise in meeting our needs.

I would offer two additional suggestions in this area for your consideration. First, a review and perhaps tightening of classifications of materials. As an example, it is my understanding ammonium perchlorate is treated as an oxidizer, not an explosive per se, for Title III reporting purposes. However, our lessons from the PEPCON incident may be to take a closer look at this classification and that of others to ensure the reporting requirements support the need for information about the existence of such materials in our communities.

Second, there is the matter of government oversight of its contractors and agencies. It is my understanding that current practices provide for minimal review and oversight of plants supporting defense-related contracts. Perhaps the federal agencies could go further by not only insisting on compliance with all federal, state and local laws, but also requiring evidence of that compliance. For instance, providing safety plans could be required of contractors dealing with volatile materials. Agency notification of local fire and building code violations if any could be considered.

I am not suggesting federal intervention in local matters but federal support as an incentive for compliance with local laws governing its suppliers.

Last, but of critical concern, is FEMA assistance to those who suffered loss as a result of the disaster. The day of the explosion, the Board of County Commissioners held an emergency meeting to request the Governor to seek designation of the area as a disaster area. Since that time, Henderson and State officials have worked to document the losses suffered. Clark County has and will continue to support that effort. As an example, we have provided the assistance of our building inspectors and the offer of their help to the City of Henderson still stands.

We're not asking for handouts but help with those out-of-pocket expenses our citizens suffered through no fault of their own. Your help in making them whole is needed.

Thank you for your concern and the opportunity to provide these comments.

Sincerely,

BRUCE L. WOODBURY
Commissioner

/nt:ld
cc: Board of County Commissioners
Donald L. Shalmy, County Manager
Mayor Lorna Kesterson, Henderson

July 8, 1988

LATE-FILED TESTIMONY OF SOUTHWEST GAS CORPORATION INTO THE ALLEGED INVOLVEMENT OF NATURAL GAS IN THE MAY 4, 1988 EXPLOSION AT THE PACIFIC ENGINEERING & PRODUCTION CO. (PEPCON) FACILITY IN THE VICINITY OF HENDERSON, NEVADA.

Introduction

Since Southwest Gas Corporation (Southwest) was not requested to appear before your committee when it met in Henderson, Nevada on June 24, 1988, we appreciate the opportunity to file this statement challenging the unsubstantiated allegations of PEPCON officials. The PEPCON explosions claimed many victims and we believe Southwest was a victim, not the cause of the explosion.

Background

On May 4th, 1988 an explosion occurred at the Pacific Engineering and Production Company (PEPCON) facility in Clark County Nevada. The facility is located in the vicinity of Henderson, Nevada.

As a direct consequence of the explosion, a Southwest Gas Corporation (Southwest) 16-inch high pressure natural gas pipeline traversing the PEPCON property was severely damaged to the extent that a portion of the pipeline had to be taken out of service, and remains out of service, today, some 65 days later. Immediately following the incident, natural gas service was lost to nearly 2,700 residents. While restoration was commenced within eight hours and continued round-the-clock, some residents were without service for up to 24 hours.

Southwest's primary concern since the May 4 incident is our forced reliance on a single pipeline to provide natural gas service to more than 120,000 customers. This concern is exacerbated by the accelerated pace of construction in the Las Vegas Valley. In the event of a failure on that pipeline, or to any major line fed by it, due to a construction accident, there is a strong likelihood that natural gas service to all these customers would be lost. Southwest will restore full-capacity service before the winter heating season by replacing the line at great expense.

It is a shame that the efforts of Southwest at restoring this high-pressure line are being diverted by the premature and unsupported PEPCON allegations.

There have been certain allegations that natural gas escaping from a "massive leak" in the Southwest pipeline may have caused or provided the fuel source to trigger the explosion. There has also been testimony presented to this Committee in the form of a statement by PEPCON that natural gas was "the only fuel source known to have been available in sufficient quantities to have provided the evident energy"1/ to have caused the explosion.

In fact, there is no evidence of any natural gas leak on any of the Southwest facilities on or adjacent to the PEPCON site. Also, research has indicated that only a very limited fuel source was necessary to trigger the initial explosion which then resulted in a series of explosions which partially consumed large quantities of stored Ammonium Perchlorate (AP) on the site. And there were numerous sources of fuel available at the PEPCON site before the explosion occurred including, but not limited to such carbonaceous materials as plastics, and wood in addition to other chemicals such as hydrogen, fiberglass, welding gases, and contaminated AP.

Southwest, along with certain local, state and federal agencies has undertaken an extensive investigation into the cause of explosion and the consequential pipeline damage. Although the investigation is only in the formative stage at this time, there has been no information or evidence located to suggest that natural gas may have caused or contributed to the explosions.

Southwest is currently in the process of testing its damaged pipeline on the PEPCON site in an effort to determine the feasibility of repair or, in the alternative, replacement of the pipeline to another location. The current testing is being conducted under a court-sanctioned agreement among the various interested parties.

TECHNICAL CONSIDERATIONS

PEPCON manufactured and stored large quantities of AP at its production facility in Clark County. The exact quantity of AP and exact storage locations have yet to be determined. It has been discovered and verified that a significant portion of the AP located on the PEPCON site was stored in an open, unprotected storage area directly above the location where the pipeline was damaged. In addition, large quantities of AP were also stored in numerous other unprotected storage locations on the PEPCON site. The storage containers consisted mostly of plastic materials with large numbers of aluminum and some steel containers. It should be emphasized that rocket propellant consists primarily of AP mixed with powdered aluminum. 2/

Explosive Characteristics of AP

AP has been characterized by PEPCON as a safe, inert chemical. In fact, it is a powerful oxidizing material with very dangerous propensities (See Attachments). When mixed with powdered aluminum, AP is used as a primary rocket propellant in the military and space missile programs. Technically, AP in a pure form will not burn. However, even though AP cannot technically burn, it can undergo a rapid exothermic decomposition which can make it become violently explosive in the absence of any fuel source or other contamination. This process is called deflagration. One method to accomplish the exothermic decomposition or deflagration is by the simple application of sufficient heat which can generate gases at "a sufficiently fast rate to become explosive." 3/ Information from a basic chemistry textbook indicates that AP can burst into flame if heated above 200 degrees centigrade. 4/ In addition, AP will exhibit the same explosive sensitivity to shock. Ignition of contaminated material can occur from friction or any open flame. The material can easily be contaminated from small amounts of impurities including any available carbonaceous materials such as plastics and wood or even ordinary dust.

The Department of Transportation classifies AP as a "High Explosive" [49 CFR 172.101; Hazardous Materials Table]. In addition, the Bureau of Alcohol, Tobacco and Firearms classifies AP as an explosive [Federal Register, August 8, 1980, Department of the Treasury, U.S. Government Printing Office, 1980].

Based on the above information and the limited investigation conducted to date, it is the opinion of investigators and consultants for Southwest that the incident of May 4th at the PEPCON facility occurred without the presence or involvement of any natural gas.

CONCLUSION

Southwest wants to reiterate its steadfast belief that the natural gas facilities it owns and operated on and adjacent to the PEPCON property were the victim and not the cause of the blasts.

Southwest has operated natural gas distribution systems for nearly 40 years and enjoys an excellent reputation for safety and high-quality service. While the report of the investigation by the Clark County Fire Department has yet to be released, the media has reported on numerous occasions that "reliable sources" involved with the investigation have confirmed that natural gas was not a cause.

We have contended all along that all parties in the PEPCON explosions should await the conclusion of the investigative process before pronouncing unequivocally the "cause" of the explosions. And we have publicly stated we would welcome investigations by the Public Service Commission of Nevada (PSCN), National Transportation Safety Board (NTSB), or any other qualified independent agency. Our own investigation, including testing of the line, was stymied until now by a District Court Order sought by PEPCON that denied us access to the site. Agreement has been reached by all parties, however, and the month-long testing process commenced on July 5.

In as much as the comprehensive investigation into the possible involvement of natural gas in the explosions has just begun, we find it incomprehensible that PEPCON could reach its conclusion.

We reaffirm our conviction that Southwest is simply another of the many victims of the PEPCON explosions. However, for reasons of safety, we maintain it is imperative that a thorough investigative analysis determine the actual cause of the incident. At that time, we hope all parties will be willing to let the chips lie where they fall.

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1. Statement of Pacific Engineering & Production Co. of Nevada (undated), p. 2.
2. W.S. Seese and G.W. Daub, Basic Chemistry 5th Ed., Prentice Hall, (1988) p.318.
3. R.C. Rhees, Pacific Engineering & Production Co., Encyclopedia of Chemical Technology [Eds. Kirk-Othmer, John Wiley & Sons, (1979)] p.663.
4. J .C. Kotz and K.F Purcell, Chemistry & Chemical Reactivity, Saunders College Publishing, (1987) p.855.

APPENDIX II

ADDITIONAL STATEMENTS SUBMITTED FOR THE RECORD

ROBERT A. ROE, New Jersey, CHAIRMAN

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Executive Director
ROBERT C. KETCHAM
General Counsel
R. THOMAS WEIMER
Republican Staff Director

June 13, 1988

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

I would like to express my disappointment and chagrin at the decision not to grant disaster relief to the people of Clark County, Nevada, in the wake of the violent explosion that destroyed the Pacific Engineering and Production Company (PEPCON) rocket fuel plant on May 4, 1988. I urge strongly that you grant the request for disaster relief in light of the special circumstances surrounding the plant and the damage the people of Clark County suffered.

The explosion at the PEPCON plant created a toxic cloud containing hydrochloric acid that lingered for hours, causing medical problems for thousands of citizens. The blast killed two people and injured over two hundred. It destroyed two businesses and damaged two hundred and seventy-five others. Eight thousand homes suffered damage from the shock of the explosion, which measured 3.5 on the Richter scale in California.

Altogether, the blast caused over seventy-three million dollars damage to a community of fifty thousand people. That is a disaster.

I understand that the Governor, the Senators and the Representatives from Nevada have pleaded for disaster relief. Still, the Federal Emergency Management Administration (FEMA) refuses to recommend to you that the Federal Government provide the needed relief. I join the plea and ask you to consider the situation that the nation and the people of Henderson face.

The PEPCON plant was one of two ammonium perchlorate (AP) plants in the country. The second plant, owned by Kerr-McGee, is also located in Henderson. Together, these two plants produced all the AP necessary for the space program, nearly all military rocket and missile weaponry, the commercial launch industry and the military and space programs of our NATO allies.

The explosion of the PEPCON plant puts this nation and our allies at great risk. Without continued operation of the Kerr-McGee plant--under the safest and most controlled conditions feasible--there will be no space program, no military missile production, and no commercial launch industry. The nation must ask the people of Henderson to recover from their wounds and allow the Kerr-McGee plant to resume operation. We cannot ask this of them and at the same time deny their plea for help.

Alpha File

The President
June 10, 1988
Page Two

I understand that one objection to disaster relief is that much of the damage is subject to insurance. However, I have learned that the majority of the uninsured loss occurred to public property such as schools and hospitals. It will cost the citizens of Henderson hundreds of thousands of dollars to replace and repair these facilities.

The decision to aid the citizens of Clark County cannot be allowed to devolve into an accountant's game. A community that supports two of the most important plants in the country has suffered misfortune as the result of that support and should be treated with compassion and concern. The people who fled the plant explosion, the children who hid under their desks at school, the hospital patients who suffered from broken glass and flying debris--these people have asked to see the human face of the Federal Government. How can we turn away?

With the highest regards and respect, I urge you, in the national interest, to grant disaster relief to Henderson, Clark County, Nevada. I look forward to your reply and to the reply of FEMA to this plea.

Sincerely,

ROBERT A. ROE
Chairman

INDEX - NEWSPAPER ARTICLES

PEPCON EXPLOSION

MAY 4, 1988

Page No.	Date	Title
1	5-05-88	Home News: "B-O-O-M !"
2	5-05-88	Home News: "BLAST FLATTENS PACIFIC ENGINEERING, MANY MIRACULOUSLY ESCAPE"
4	5-05-88	Review Journal: "BLASTS STUN VALLEY"
4	5-05-88	Review Journal: "DISASTER IN HENDERSON KILLS WORKER"
4	5-05-88	Review Journal: "DAMAGE WIDESPREAD IN DOWNTOWN HENDERSON"
4	5-05-88	Review Journal: "FACILITIES LEND HELPING HAND TO DISPLACED RESIDENTS"
7	5-05-88	Review-Journal: "HOMES HIT HARD NEAR BLAST SITE"
7	5-05-88	Review-Journal: "CLOUD'S HEIGHT EASED HEALTH EFFECTS"
7	5-05-88	Review-Journal: "FIRM MAKES SHUTTLE FUEL INGREDIENT"
7	5-05-88	Review-Journal: "GRIM WARNING UTTERED BEFORE EXPLOSIONS"
7	5-05-88	Review-Journal: "MARSHMALLOW FACILITY DESTROYED"
7	5-05-88	Review-Journal: "CREWS WORK TO RESTORE GAS, ELECTRIC SERVICE"
8	5-05-88	Review-Journal: "TYPICAL DAY TURNS CHAOTIC"
9	5-05-88	Review-Journal: "INVESTIGATORS INSPECT RUBBLE"
10	5-05-88	Portland, Maine Herald: "BLAST KILLS ONE, INJURES 150"

Page No.	Date	Title
11	5-05-88	Home News: "CURFEW IMPOSED"
11	5-05-88	Home News: "EMERGENCY DECLARED"
12	5-05-88	Review-Journal: "LAS VEGANS RESPOND IN TIME OF NEED"
13	5-05-88	Home News: "ONE MAN'S VIEW - MIKE O'CALLAGHAN"
13	5-06-88	Arizona Republic: "ALARM PLAN, RECORD ON SAFETY QUESTIONED"
14	5-06-88	Las Vegas Sun: "CATASTROPHE 'NO SURPRISE'"
15	5-06-88	Las Vegas Sun: "VICTIMS MAY QUALIFY FOR FEDERAL ASSISTANCE"
15	5-06-88	Las Vegas Sun: "NEVADA OFFICIAL SAYS RECORD SHOWS PACIFIC 'SAFETY-CONSCIOUS'"
16	5-06-88	Las Vegas Sun: "HUNDREDS OF HOMEOWNERS FILE CLAIMS FOR DAMAGE TO HOUSES"
17	5-06-88	Las Vegas Sun: "SCHOOLS SUSTAIN MORE THAN $1 MILLION DAMAGE FROM EXPLOSIONS - STUDENTS NARROWLY ESCAPED CATASTROPHIC INJURIES"
18	5-06-88	Las Vegas Sun: "EXPLOSIONS CAUSE MORE THAN $100 MILLION DAMAGE TO HOMES"
19	5-06-88	Las Vegas Sun: "FACTORY OFFICIALS VOW TO REBUILD BURNED-OUT PLANTS"
20	5-06-88	Las Vegas Sun: "SOUTHERN NEVADA HOSPITALS TREAT 350 VICTIMS OF BLAST"
21	5-06-88	Las Vegas Sun: "EVACUATION ALARM BEFORE EXPLOSION SAVED SCORES OF LIVES"
21	5-06-88	Las Vegas Sun: "FIRST LAWSUIT FILED SEEKS $2 MILLION"
21	5-06-88	Las Vegas Sun: "EMERGENCY RESPONSE APPLAUDED"
22	5-06-88	Las Vegas Sun: "SHOCK WAVES FROM HENDERSON BLASTS HIT PENTAGON"
22	5-06-88	Las Vegas Sun: "STUNNED STEEL WORKERS REVIEW EVENTS OF THE DAY PEPCO PLANT EXPLODED"
23	5-06-88	Las Vegas Sun: "EXPLOSION VICTIM RECALLS AN EARLIER FAMILY DISASTER - SOME HENDERSONITES COULDN'T GET HOME, FEARED THE WORST"

Page No.	Date	Title
24	5-06-88	Las Vegas Sun: "FAMILY OF PEPCO'S COMPTROLLER FEARS HE DIDN'T MAKE IT OUT - MISSING COMPTROLLER WARNED OTHERS"
25	5-06-88	Review-Journal: "MASS CHECKS OF BUILDINGS NOT PLANNED"
25	5-06-88	Review-Journal: "GLASS SALES BRISK DURING CLEANUP"
26	5-06-88	Review-Journal: "SHATTERED COMMUNITY REGROUPS"
28	5-06-88	Review-Journal: "HENDERSON CLEANS UP MESS - RESIDENTS, BUSINESSES TACKLE JOB - HENDERSON SCHOOLS INSPECTED"
29	5-06-88	Review-Journal: "BLASTS LEAVE WORKERS UNCERTAIN OF FUTURES"
30	5-06-88	Review-Journal: "FIRE QUICKLY TURNED TO DISASTER"
31	5-06-88	Review-Journal: "MISSING MAN ALWAYS THOUGHT OF OTHERS"
31	5-06-88	Review-Journal: "KERR McGEE PLANT HALTS PRODUCTION OF COMPOUND"
31	5-06-88	Review-Journal: "PACIFIC ENGINEERING DISASTER RANKS AMONG AREA'S WORST"
32	5-06-88	Review-Journal: "BLASTS EXPECTED TO PROMPT LAWSUITS"
33	5-06-88	Review Journal: "CHEMICAL PLANT EMPLOYED SIMPLE PROCESS"
33	5-06-88	Review-Journal: "CALL TO 911 OPERATOR RECOUNTED"
33	5-06-88	Review-Journal: "COMMUNITY UNITES IN FACE OF DISASTER"
34	5-06-88	Review-Journal: "COMPLEX TASK OF CALCULATING PROPERTY DAMAGES UNDERWAY - INSURANCE COMPANIES BRING IN SPECIALISTS"
35	5-06-88	Review-Journal: "OFFICIALS OF EMERGENCY AGENCIES THANKFUL FOR SUCCESSFUL OPERATION"
35	5-06-88	Review-Journal: "FINANCIAL INSTITUTIONS ANNOUNCE LOAN PLANS"
36	5-06-88	Las Vegas Sun: "INSIGHT - ST. ROSE DE LIMA PROVED ITS WORTH DURING TRAGEDY"

Page No.	Date	Title
37	5-06-88	Review-Journal: "OFFICIALS, WORKERS DIFFER ON PLANT'S SAFETY"
37	5-06-88	Review-Journal: "FRIENDS SAY VICTIM WAS TRYING TO HELP OTHERS"
38	5-06-88	Review-Journal: "SHUTTLE DELAYS NOT FORESEEN"
39	5-06-88	Arizona Republic: "REAGAN ASKED TO OK AID FOR HENDERSON"
[illegible]	5-05-88	Washington Post: "BLASTS DESTROY NEVADA ROCKET PLANT"
45	5-06-88	Las Vegas Sun: "WHERE I STAND - BRIAN GREENSPUN"
45	5-06-88	Las Vegas Sun: "WHERE I STAND - MIKE O'CALLAGHAN"
46	5-07-88	Las Vegas Sun: "SCHOOL OFFICIALS ASSESS DAMAGE FROM BLAST"
47	5-07-88	Las Vegas Sun: "MISSING MAN MADE PHONE CALL TO AUTHORITIES ON BLAST"
47	5-07-88	Las Vegas Sun: "DEVELOPER SEEKS BLAST INVESTIGATION"
48	5-07-88	Las Vegas Sun: "REID, BILBRAY CALL FOR DEFENSE DEPARTMENT BRIEFING"
49	5-07-88	Las Vegas Sun: "BRYAN: DON'T REBUILD PLANT IN LAS VEGAS VALLEY - BUILD IN 'ISOLATED AREA'"
50	5-07-88	Las Vegas Sun: "SOUTHERN NEVADA AGENCIES OPEN DOORS TO VICTIMS OF BLAST"
51	5-07-88	Review-Journal: "RESIDENTS OPPOSE PLANT REOPENING"
51	5-07-88	Review-Journal: "COUNTY FIRE CHIEF AGHAST AT STORIES OF PLANT BLAZES"
53	5-07-88	Review-Journal: "PROPANE BUSINESS PLANNED FOR BUSINESS PARK AT BLAST SITE"
54	5-07-88	Review-Journal: "PLANT WON'T BE REBUILT IN VALLEY"
56	5-08-88	Las Vegas Sun: "COMPANY: LET EXPERTS LAY BLAME - PACIFIC ENGINEERING WON'T DISCUSS CAUSE"

Page No.	Date	Title
57	5-08-88	Las Vegas Sun: "COUNTY FAILS TO DOCUMENT PEPCON FIRE INSPECTIONS"
58	5-08-88	Review-Journal: "LUCK KEPT DISASTER DEATH TOLL LOW"
59	5-08-88	Review-Journal: "BRYAN PANEL TO EXPLORE CHEMICAL PLANT EXPLOSION"
59	5-08-88	Review-Journal: "LAW STOPS DISCLOSURE OF RECORDS"
60	5-08-88	Las Vegas Sun: "BRYAN TO NAME PANEL FOR PEPCON BLAST PROBE"
60	5-08-88	Review Journal: "PLANT EXECS DENY FAULT IN DEADLY BLAST"
62	5-09-88	Review-Journal: "11 AREA SCHOOLS REOPENED"
62	5-10-88	Home News: "LOCAL LIBRARY CLOSES FOR REPAIRS"
63	5-09-88	Home News: "BASIC HIGH SAFE FOR STUDENTS"
63	5-12-88	Home News: "STEELWORKERS UNION OFFERS ASSISTANCE FOR DISASTER VICTIMS"
63	5-09-88	Las Vegas Sun: "EPA OFFICIALS TEST CHEMICALS AT BLAST SITE"
64	5-10-88	Home News: "HENDERSON POLICE RESPOND QUICKLY TO DISASTER"
65	5-10-88	Home News: "PEPCON'S PRESS STATEMENT PUBLISHED"
66	5-10-88	Home News: PICTURE - HOME LETTING IN LIGHT
66	5-10-88	Home News: PICTURE - SCHOOL EVACUATION PLAN
67	5-10-88	Home News: PICTURE - BLAST SITE
68	5-10-88	Home News: "CRASH - LOCAL GLAZERS WORK AROUND-THE-CLOCK TO REPAIR DAMAGE"
70	5-10-88	Home News: "BUILDING PERMITS NEEDED, BUT NO FEES TO BE CHARGED"
71	5-10-88	Home News: "FAKE INSPECTORS IN GREEN VALLEY"
71	5-10-88	Home News: "FEUD OVER PLANT SAFETY, ACCIDENT'S CAUSE CONTINUES"

Page No.	Date	Title
71	5-10-88	Home News: "BLAST CHRONOLOGY LISTED, EVENTS DISPUTED"
72	5-10-88	Home News: PICTURE - WORKERS REPAIRING DAMAGE
72	5-10-88	Home News: PICTURE - GOVERNOR BRYAN AT COMMAND POST
73	5-10-88	Home News: PICTURE - COUNCILMAN HAFEN INSPECTS DAMAGE TO FIRE TRAINING CENTER
73	5-10-88	Home News: "UNION WARNS OF DOOR-TO-DOOR SCAM"
73	5-10-88	Home News: "PRAYER SERVICE SLATED AT ST. PETER'S"
74	5-10-88	Home News: "PEPCON OFFICIALS DENY BLAST BLAME"
75	5-10-88	Home News: PICTURE - BLAST SITE
75	5-10-88	Home News: "MEETING TODAY OFFERS GUIDE TO HELP, SERVICES AVAILABLE"
76	5-10-88	Home News: "BASIC HIGH SCHOOL TO REOPEN WEDNESDAY"
77	5-10-88	Home News: "PHYSICS PROF EXPLAINS SHOCK WAVES"
77	5-10-88	Home News: "ANIMAL IMPOUND FEES WAIVED DUE TO BLASTS"
77	5-10-88	Review-Journal: "CLEANUP AT BASIC HIGH SCHOOL CONTINUES ON SCHEDULE"
78	5-10-88	Las Vegas Sun: "RED CROSS - 3,176 HOMES DAMAGED"
78	5-10-88	Home News: "ANOTHER VIEW - JOHN DAILEY"
79	5-10-88	Las Vegas Sun: "DEATHS, INJURIES CAN BE PREVENTED"
79	5-10-88	Las Vegas Sun: "MAJOR PLAN ALMOST WASN'T NEEDED TO DISTRIBUTE INJURED TO HOSPITALS"
79	5-10-88	Las Vegas Sun: "STUDENTS BACK IN SCHOOL AFTER BLAST"
80	5-10-88	Review-Journal: PICTURE - EXPLOSION VICTIM MOURNED"
80	5-10-88	Review-Journal: "PLANT DANGER KNOWN BEFORE BLAST"
81	5-10-88	Review-Journal: "CHEMISTS DISPUTE CONTENTION THAT SUBSTANCE WILL NOT BURN"

Page No.	Date	Title
82	5-10-88	Review-Journal: "STUDENTS RETURN TO CLASS"
83	5-10-88	Las Vegas Sun: "SLAIN PEPCON WORKER MOURNED"
84	5-10-88	Review-Journal: "TOXIC CONTAMINATION CURTAILS PROBES"
84	5-10-88	Review-Journal: "FIREFIGHTERS FILE COMPLAINT OVER EXPOSURE TO CHEMICALS"
85	5-10-88	Review-Journal: "MILITARY MAY HAVE TO IMPORT ROCKET FUEL"
85	5-10-88	Review-Journal: "FAMILY, FRIENDS BID FINAL FAREWELL TO BLAST VICTIM"
86	5-10-88	Las Vegas Sun: "COUNTY OK'D HOMES NEAR PEPCON - HENDERSON OFFICIALS OPPOSED HOMES NEAR PEPCON"
87	5-10-88	Las Vegas Sun: "REID QUESTIONS MILITARY SITING OF ROCKET FUEL PLANTS"
87	5-10-88	Las Vegas Sun: "PEPCON TO REFILL GAS TANKS"
88	5-10-88	Home News: "HENDERSON CITY COUNCIL TOURS DEVASTATED TOWN"
90	5-10-88	Home News: "LOCAL SCHOOLS REPAIRED IN TIME TO OPEN DOORS MONDAY"
91	5-11-88	Review-Journal: "MARSHMALLOW MAKERS UNAWARE OF DANGERS"
92	5-11-88	Review-Journal: "BLAST VICTIM MOURNED BY FRIENDS, CO-WORKERS"
93	5-11-88	Review-Journal: "VICTIM OF PLANT BLAST STILL STRUGGLING FOR LIFE"
93	5-11-88	Review-Journal: "BRYAN SEEKING INSPECTION REPORTS"
94	5-11-88	Review-Journal: "RESENTMENT FOR PEPCON STIRS WORKERS"
94	5-11-88	Review-Journal: "DMV TO HELP PLANT WORKERS"
94	5-11-88	Review-Journal: "BASIC HIGH SCHOOL REMAINS CLOSED"
95	5-11-88	Las Vegas Sun: "PEPCON WORKER EULOGIZED"

Page No.	Date	Title
96	5-11-88	Review-Journal: "COUNTY FIGHTS PLANT STARTUP - KERR McGEE RESUMES PRODUCTION OF CHEMICAL"
97	5-11-88	Las Vegas Sun: "ROCKET FUEL PRODUCTION TO RESUME - COMMISSIONER WOODBURY DECRIES KERR McGEE DECISION"
97	5-11-88	Las Vegas Sun: "BASIC HIGH SCHOOL SET FOR REOPENING"
98	5-11-88	Las Vegas Sun: "KIDD WATER PRESSURE BELOW PAR FOR COUNTY"
98	5-11-88	Review-Journal: "WOODBURY ADDRESSES COUNCIL"
99	5-11-88	Las Vegas Sun: "LEAD OXIDES FOUND IN AIR NEAR PLANT"
99	5-12-88	Home News: "BUILDING DAMAGE CONTINUES TO BE REPORTED"
100	5-11-88	Review-Journal: PICTURE - AERIAL VIEW OF BLAST AREA
100	5-11-88	Review-Journal: "PEPCON WORKERS OFFER THEORIES ON CAUSE OF PLANT'S EXPLOSIONS"
101	5-12-88	Home News: "WOODBURY PLEDGES TO HELP CITY, CLOSE KERR McGEE"
102	5-12-88	Home News: "AIR TESTS NOT IN, SCHOOL STILL OUT"
102	5-12-88	Home News: "KERR McGEE RESUMES OPERATION"
103	5-12-88	Home News: "LOCAL OFFICIALS EXPLODE, VENT ANGER AT INDUSTRIES, COUNTY"
103	5-12-88	Review-Journal: "HENDERSON DIVIDED OVER CHEMICAL PLANT"
104	5-12-88	Home News: "CHEMICAL CLARIFIED"
104	5-12-88	Review-Journal: "BUILDING MATERIAL SUPPLIERS SCRAMBLING TO MEET DEMANDS"
105	5-12-88	Home News: "HENDERSON FIRE (DEPT.) FIRST ON BLAST SCENE"
106	5-12-88	Home News: "YOUR VIEW - CITIZEN LETTERS TO THE EDITOR"
107	5-12-88	Home News: "VIEWPOINT - ANNEXATION, SPECIAL PAYMENTS ONLY SURE WAY TO LIVE WITH INDUSTRIES"

Page No.	Date	Title
107	5-12-88	Review-Journal: "OPINION - DEALING WITH FALLOUT OF HENDERSON BLAST"
108	5-12-88	Las Vegas Sun: "BRYAN SEEKS TO PREVENT PRODUCTION OF CHEMICAL"
108	5-12-88	Las Vegas Sun: "ONE MAN'S VIEW - MIKE O'CALLAGHAN"
109	5-12-88	Home News: "FREEWAY UNDAMAGED"
109	5-12-88	Las Vegas Sun: "DEFENSE OFFICIALS MEET ON ROCKET FUEL"
110	5-12-88	Review-Journal: "HENDERSON BUSINESSES RECUPERATING FROM BLAST"
111	5-12-88	Home News: PICTURE - EXPLOSION
112	5-12-88	Home News: "GREEN VALLEY RESIDENTS BEGIN PICKING UP THE PIECES"
112	5-12-88	Las Vegas Sun: "UNION SEEKS TO PROBE SITE ALONG WITH INVESTIGATORS"
113	5-12-88	Home News: "VISITORS AT KIDD MARSHMALLOW WITNESS PEPCON FIRE, EXPLOSION"
114	5-12-88	Las Vegas Sun: "BASIC CLOSED TWO MORE DAYS"
114	5-12-88	Las Vegas Sun: "KERR McGEE FIRE CALL FALSE; BLAZE AT DIFFERENT COMPANY"
115	5-12-88	Las Vegas Sun: "STEELWORKERS BATTLE PEPCON"
116	5-12-88	Las Vegas Sun: "PEPCON STONEWALLS REPORTS - LEAD CONTAMINATION TURNS UP IN SOIL TEST"
116	5-12-88	Review-Journal: "BASIC HIGH SCHOOL CLOSED FOR ONE MORE DAY"
117	5-12-88	Review-Journal: "BRYAN STYMIED IN OBTAINING CHEMICAL PLANT SAFETY RECORDS"
117	5-12-88	Review-Journal: "FUEL PLANT SITES CONSIDERED"
117	5-12-88	Review-Journal: "PACIFIC ENGINEERING REPORTEDLY BLAMING GAS LEAK"
118	5-12-88	Review-Journal: "KERR McGEE REFUSES TO HALT PRODUCTION"

Page No.	Date	Title
120	5-12-88	Las Vegas Sun: "EDITORIAL - THOU SHALT NOT KILL - HANK GREENSPUN"
122	5-12-88	Review-Journal: "STATE DILUTED OSHA STANDARDS"
123	5-13-88	Las Vegas Sun: "NATURAL GAS SUSPECT IN PEPCON BLASTS - SOUTHWEST GAS DENIES CAUSING EXPLOSION"
124	5-13-88	Las Vegas Sun: "WITNESS SAYS FIRE STARTED IN MOTOR ATOP PACIFIC PLANT DRYER"
124	5-13-88	Las Vegas Sun: "FIRE SAFETY OFFICER CLAIMS CHIEF THREATENS DISMISSAL"
124	5-13-88	Las Vegas Sun: "KERR McGEE SHUTDOWN AVOIDS COUNCIL ACTION"
125	5-13-88	Las Vegas Sun: "KERR McGEE SHUTS DOWN - BRYAN TELLS NEVADANS 'SAFETY FIRST'"
126	5-13-88	Nellis AFB Bullseye: "HENDERSON EXPLOSION - NELLIS LENDS A HAND IN THE AFTERMATH OF DISASTER"
126	5-13-88	Review-Journal: "HENDERSON PLANTS USE SAME CHEMICALS FOUND AT PEPCON"
127	5-13-88	Review-Journal: "GIBSON BLAMES BLASTS ON NATURAL GAS LEAK"
127	5-13-88	Las Vegas Sun: "UNION PACIFIC RAILROAD SUFFERS FROM EXPLOSION"
128	5-13-88	Las Vegas Sun: "PEPCON ADDED TO COMPLEX SANS BUILDING PERMITS - PANEL TO REVIEW DANGER STANDARDS - WOODBURY SHOCKED ABOUT LACK OF PERMITS"
128	5-13-88	Review-Journal: "GOVERNOR APPOINTS PANEL TO REVIEW GROUP OF INDUSTRIES"
129	5-13-88	Review-Journal: "COUNCILMAN WARNS FIRM ON SAFETY"
129	5-14-88	Review-Journal: "BASIC HIGH STUDENTS MUST MAKE UP LOST TIME"
129	5-14-88	Review-Journal: "ACCESS PLAN APPROVED FOR RAVAGED PLANT SITE"
130	5-13-88	Review-Journal: "FIRE DEPARTMENT HAD NO SAFETY PLANS FROM PACIFIC ENGINEERING"

Page No.	Date	Title
130	5-13-88	Review-Journal: "KERR McGEE STOPS FUEL PRODUCTION"
130	5-14-88	Review-Journal: "REPORTS SHOW PEPCON PUT CHLORINE IN AIR"
132	5-13-88	Review-Journal: "EXTENT OF LEAD TAINTING PROBED - PROPANE TANKS TO BE FILLED AT SITE OF EXPLOSIONS"
133	5-14-88	Las Vegas Sun: "BASIC STUDENTS RETURN; MUST MAKE UP ONE DAY"
134	5-14-88	Las Vegas Sun: "QUICK FILING OF SUITS FROWNED ON BY TRIAL LAWYERS ASSOCIATION"
134	5-14-88	Las Vegas Sun: "PEPCON OPEN PIT BURNING CITED BY COUNTY HEALTH DISTRICT"
135	5-14-88	Las Vegas Sun: "STEELWORKERS TELL IT TO JUDGE: RELEASE PLANT SAFETY REPORTS"
135	5-15-88	Las Vegas Sun: PICTURE - 'I SURVIVED THE BLAST' DAY - BURKHOLDER JUNIOR HIGH SCHOOL
136	5-14-88	Las Vegas Sun: "JUDGE WORKS OUT PLAN TO PROVIDE 'ORDERLY ACCESS' FOR PEPCON PROBE"
137	5-15-88	Las Vegas Sun: "NRC ORDERED KERR McGEE OVERSIGHT - PRIVATE MONITORING OF KERR McGEE OPPOSED"
138	5-15-88	Review-Journal: "OPINION - IF PLANTS AREN'T SAFE, THEY MUST BE MOVED"
139	5-15-88	Review-Journal: "POLITICAL REVERBERATIONS OF PEPCON BLAST RIPPLE ACROSS STATE"
140	5-15-88	Las Vegas Sun: "INSIGHT - SCHOOL PERSONNEL RESPONDED WELL IN FACE OF EMERGENCY"
141	5-16-88	Las Vegas Sun: "FIRE DEPARTMENT PEPCON PROBE STIFLED - RESTRAINING ORDER ISSUED AGAINST FIRE DEPARTMENT"
141	5-17-88	Review-Journal: "BLAST SITE OPENED FOR LIMITED INSPECTIONS"
141	5-17-88	Home News: "STEELWORKERS TO HOLD PUBLIC MEETING"
142	5-16-88	Las Vegas Business Press: "PACIFIC ENGINEERING NEEDS CUSTOMER SUPPORT TO REBUILD"

Page No.	Date	Title
142	5-17-88	Home News: "COUNCIL MOVES TO McCAW SCHOOL FOR MEETING TONIGHT"
143	5-17-88	Home News: "AMERICAN PACIFIC CORPORATION RELEASES COMPANY'S PRELIMINARY INVESTIGATION ON PACIFIC ENGINEERING FIRE"
143	5-17-88	Review-Journal: "ANNEXATION OF FACTORY LAND SOUGHT"
144	5-17-88	Home News: "FORMER SECRETARY WITH DIARY ALLEGES PEPCON COVER-UP"
145	5-17-88	Review-Journal: "BLAST VICTIMS AWAIT REPAIRS ON RESIDENCES"
145	5-17-88	Home News: "OFFICE TO ASSESS DAMAGES"
146	5-17-88	Home News: "UNION DISSATISFIED, TO TOUR PEPCON SITE"
146	5-17-88	Las Vegas Sun: "AIR MONITORS SEE SMALLER LEAD LEVELS"
146	5-17-88	Las Vegas Sun: "WOODBURY WANTS PLANT AREA ANNEXED"
147	5-17-88	Las Vegas Sun: "INSIGHT - FIRE OFFICIALS SHOULD PROBE BLAST"
148	5-17-88	Las Vegas Sun: "DIARY DETAILS PEPCON FIRES - PEPCON SECRETARY ORDERED NOT TO REPORT FIRES OR INFORM MEDIA"
148	5-17-88	Las Vegas Sun: "PEPCON EXPLOSION MAY COST CLARK COUNTY $100,000"
149	5-17-88	Review-Journal: "OPINION - PLANT SAFETY RECORDS SHOULD BE RELEASED"
149	5-17-88	Las Vegas Sun: "COUNTY TO HEAR BLAST REPORT, CITIZEN INPUT"
149	5-17-88	Home News: "TESTING AVAILABLE FOR LEAD OXIDE"
150	5-17-88	Las Vegas Sun: "HENDERSON STAFF TO BE TRAINED IN INSPECTION REPORT READING"
150	5-17-88	Las Vegas Sun: "PSC REFUSES SOUTHWEST GAS COMPANY ACCESS REQUEST"
150	5-17-88	Home News: "ANOTHER VIEW - JOHN DAILEY"

Page No.	Date	Title
152	5-17-88	Las Vegas Sun: "BLAST SITE OPENED TO OTHERS - FIRE OFFICIALS SAY COURT ORDER HAMPERS INVESTIGATION"
153	5-18-88	Las Vegas Sun: "PLANT SAFETY IS ISSUE WITH RESIDENTS - CITIZENS AIR VIEWS ABOUT SAFETY OF AREA PLANTS"
153	5-18-88	Review-Journal: "DISASTER COMMISSION SETS FIRST MEETING"
154	5-18-88	Review-Journal: "FIRE REPORT CONTRADICTS LEAK THEORY"
155	5-18-88	Review-Journal: "BLASTS LEAVE DEEP SCARS IN HENDERSON"
155	5-18-88	Las Vegas Sun: "AIR FORCE SEEKS CAUSE OF HENDERSON EXPLOSION"
156	5-18-88	Las Vegas Sun: "PUBLIC COMMENT STIFLED AT COMMISSION MEETING - CHRISTENSEN CALLS FOR BETTER EMERGENCY COORDINATION"
157	5-18-88	Review-Journal: "OFFICIALS MOVE TO REASSURE PUBLIC"
158	5-18-88	Review-Journal: "SIIS SENDS CHECKS TO WIDOWS OF WORKERS KILLED IN BLAST"
158	5-18-88	Las Vegas Sun: "COUNTY MANAGER REPORT REVIEWS EXPLOSION WITHOUT COMMENT"
159	5-18-88	Las Vegas Sun: "LEAD A NONEXISTENT PROBLEM AFTER BLAST"
159	5-18-88	Review-Journal: "PEPCON SEEKS OPERATION RESTART"
159	5-18-88	Las Vegas Sun: "PEPCON MUM ABOUT UNREPORTED PLANT FIRES - KEEPS QUIET ON CHARGES IN DIARY"
160	5-18-88	Review-Journal: "PEPCON OFFICIALS OPTIMISTIC GOVERNMENT WILL HELP REBUILD PLANT"
160	5-19-88	Home News: "WARMING REPEATED ABOUT REPAIRS"
161	5-19-88	Home News: "COUNTY HEALTH OFFICIAL DETAILS BLAST INJURIES"
161	5-19-88	Home News: "OFFICIALS CALL FOR BMI'S ANNEXATION"
162	5-19-88	Home News: "SECRETARY DENIES COMPANY FIRING"

Page No.	Date	Title
163	5-19-88	Las Vegas Sun: "FEDS TO DECIDE BY FRIDAY ON DISASTER STATUS"
163	5-19-88	Las Vegas Sun: "PEPCON MET DEADLINE FOR REMOVAL OF CHLORINE"
163	5-19-88	Las Vegas Sun: "FIRE CHIEF DEFENDS INVESTIGATION TEAM"
164	5-19-88	Home News: "CITIZENS SPLIT OVER FATE OF LOCAL INDUSTRIES"
165	5-19-88	Home News: "FOREMAN CONFIRMS WEYBURN'S STATEMENTS"
166	5-19-88	Home News: "DEVELOPERS FORESEE CONTINUED GROWTH IN WAKE OF EXPLOSION"
166	5-20-88	Review-Journal: "TRAINS WITH CHEMICALS CONCERN AREA RESIDENTS"
167	5-19-88	Review-Journal: "UNION VOWS TO APPEAL COURT RULINGS"
167	5-20-88	Review-Journal: "NEVADA BLAST ROCKS SHUTTLE SCHEDULE"
168	5-19-88	Las Vegas Sun: "KERR McGEE TO FUND HALF THE FEE FOR SIX-MAN INSPECTION TEAM"
168	5-20-88	Las Vegas Sun: "BLUE RIBBON INDUSTRIAL PANEL MEETS TO FORMULATE OBJECTIVES"
169	5-22-88	Las Vegas Sun: "STATE BEGINS EFFORTS TO IMPROVE EMERGENCY FIELD COMMUNICATIONS"
170	5-20-88	Las Vegas Sun: "SOUTHWEST GAS DISPUTES PEPCON CLAIM OF LEAK - PSC HAS RESPONSIBILITY TO INSPECT MAJOR GAS LINES"
171	5-20-88	Review-Journal: "STATE ENVIRONMENTAL AGENCY LACKED AUTHORITY OVER PEPCON"
172	5-19-88	Review-Journal: "GAS FIRM QUESTIONS EVIDENCE"
173	5-24-88	Las Vegas Sun: "COPYING RULES TO BE INTERPRETED"
174	5-22-88	Las Vegas Sun: "BLAST HALTED GIBSONS' DREAMS"
176	5-23-88	Las Vegas Business Press: "INSURANCE QUESTIONS UNRESOLVED AFTER EXPLOSION"

Page No.	Date	Title
178	5-22-88	Las Vegas Sun: "AMMONIUM PERCHLORATE NORTHERN NEVADA FIRE SUSPECT"
178	5-24-88	Las Vegas Sun: "LAS VEGAS PHYSICIAN PLANS CEREMONY TO HONOR PEPCON BLAST HEROES"
179	5-24-88	Review-Journal: "TESTS FOR DANGEROUS DIOXINS SET AT PEPCON"
179	5-24-88	Review-Journal: "PEPCON RAN CHEMICAL DUMP AT SITE"
180	5-24-88	Las Vegas Sun: "BRYAN PLEDGES INVESTIGATION OF INSPECTION CHARGES"
180	5-25-88	Review-Journal: "WORKERS: PRIOR NOTICE OF INSPECTIONS ROUTINE"
181	5-24-88	Home News: "NO LEAD FOUND IN GREEN VALLEY AFTER EXPLOSIONS"
181	5-24-88	Las Vegas Sun: "SOUTHWEST GAS WANTS TO TEST LINE"
181	5-26-88	Las Vegas Sun: "COURT SETS PEPCON HEARING"
182	5-24-88	Home News: "NO DISASTER DECISION GIVEN"
183	5-25-88	Review-Journal: "SAFETY RECORDS MAY BE RELEASED"
183	5-25-88	Las Vegas Sun: "ACCESS TO RECORDS REQUESTED"
184	5-25-88	Las Vegas Sun: "NEVADA WARNED ABOUT AMMONIUM PERCHLORATE 40 YEARS AGO"
184	5-25-88	Review-Journal: "UNION SEEKS ACCESS TO SITE OF EXPLOSION"
185	5-25-88	Las Vegas Sun: "WELDERS PROBABLY SPARKED FIRE, EXPLOSIONS AT PEPCON"
186	5-25-88	Las Vegas Sun: "REID BLASTS FEMA ON AID REQUEST"
186	5-25-88	Las Vegas Sun: "UNION, HOURLY WORKERS CLAIM HENDERSON PLANTS ARE NOT SAFE"
187	5-25-88	Review-Journal: "DUMP EVIDENCE CONCERNS KIDD OWNERS"
187	5-26-88	Review-Journal: "PEPCON FOLLOW-UP IN QUESTION"
188	5-26-88	Review-Journal: "HIGH COURT SETS PEPCON HEARING"

Page No.	Date	Title
188	5-26-88	Review-Journal: "PEPCON WORKERS' RELIEF EFFORT DRAWS DONATION"
189	5-26-88	Home News: "YOUR VIEW - LETTER TO THE EDITOR"
190	5-25-88	Review-Journal: "FEDS TO REASSESS DISASTER RELIEF"
190	5-26-88	Las Vegas Sun: "EPA TESTS PEPCON FOR DIOXIN"
191	5-26-88	Las Vegas Sun: "INSIGHT - FEMA'S FAILURE TO ACT ON AID REQUEST SMACKS OF POLITICS"
192	5-26-88	Home News: "RESIDENTS WORKING TO KEEP TRACK OF TRAINS TRANSPORTING CHEMICALS"
192	5-26-88	Review-Journal: "NATURAL GAS RULED OUT AS BLAST CAUSE"
193	5-26-88	Home News: "COMMISSION COMMENDS PUBLIC EMPLOYEES FOR THEIR EFFORTS DURING BLASTS, FIRE"
194	5-27-88	Las Vegas Sun: "DISTRICT COURT BARS PEPCON"
194	5-27-88	Las Vegas Sun: "FEMA OFFICIALS SURVEY PEPCON BLAST DAMAGE"
195	5-26-88	Las Vegas Sun: "BLAST SITE WEIGHED AGAINST FEDERAL DOLLARS - INVESTIGATION TEAM PROBES COUNTY NEED"
195	5-27-88	Review-Journal: "WHITE HOUSE INVOLVED IN DISASTER AID DECISION"
196	5-27-88	Las Vegas Sun: "KERR McGEE COULD REOPEN WITHIN WEEK - AMMONIUM PERCHLORATE SURPRISES EXPERT PANEL"
196	5-27-88	Review-Journal: "KERR McGEE TO RESUME PRODUCTION"
198	5-27-88	Review-Journal: "ILLEGAL INSPECTION CLAIMS PROBED"
199	5-27-88	Review-Journal: "PEPCON DENIED ACCESS TO INTERVIEWS"
199	5-27-88	Review-Journal: "FEDS TOUR DISASTER AREA AGAIN"
199	5-27-88	Review-Journal: "OPINION - FEDS' SECOND VISIT SMACKS OF POLITICS"
200	5-28-88	"FIREFIGHTER TELLS HIS PEPCON BLAST STORY"

Page No.	Date	Title
202	5-28-88	Review-Journal: "ENVIRONMENTAL AGENCY TELLS FIRMS OF INSPECTIONS"
202	5-28-88	Review-Journal: "NEVADA OFFICIALS DISMAYED BY RULING ON DISASTER FUNDS"
203	5-28-88	Review-Journal: "LEGISLATORS BACK ACTION TO OPEN PLANT SAFETY RECORDS"
203	5-28-88	Review-Journal: "FIRE CHIEF SEEKS OK TO MOVE BLAST EVIDENCE"
204	5-28-88	Las Vegas Sun: "'OUT OF CONTROL' FEDS NIX HENDERSON DISASTER AID - FEMA 'DOWNRIGHT DISHONEST' GOV. BRYAN SAYS"
204	5-28-88	Las Vegas Sun: "AG TO RULE ON WORKERS' RIGHTS TO COPY RECORDS"
205	5-28-88	Las Vegas Sun: "KID TALK - HENDERSON BLAST"
206	5-29-88	Review-Journal: "HEROES OF PEPCON DISASTER TO BE HONORED MONDAY"
207	5-29-88	Las Vegas Sun: "WHERE I STAND - HANK GREENSPUN"
208	5-29-88	Review-Journal: "HENDERSON SOIL, WATER ASSAULTED"
208	6-02-88	Home News: "MAYOR DEFENDS EMERGENCY RESPONSE"
209	5-30-88	Las Vegas Sun: PICTURE - HEROES HONORED
210	5-29-88	Review-Journal: "ATMOSPHERE OFTEN POLLUTED WITH GASES"
210	6-02-88	Reno Gazette Journal: "EDITORIAL - HENDERSON BLAST - WILL OUR LEADERS EVER LEARN TO PLAN"
211	5-31-88	Home News: "HOUSING AUTHORITY RECEIVES HUD FUNDS TO REPAIR DAMAGE"
214	5-31-88	Review-Journal: "STATE SAFETY LAWS QUESTIONED"
214	5-31-88	Home News: "FEMA RETURNS TO HENDERSON"
214	5-31-88	Home News: "CITY INSURANCE NOT HURT BY DISASTER"
216	5-31-88	Home News: "REID: FEMA ACTIONS TURN HENDERSON INTO 'POLITICAL FOOTBALL'"
216	5-31-88	Home News: "BETTER COMMUNICATIONS NEEDED FOR EMERGENCIES"

Page No.	Date	Title
218	5-31-88	Home News: "WITH CORRECTIONS, KERR McGEE FREE TO RESUME PRODUCTION"
218	6-01-88	Las Vegas Sun: "EXPERTS COLLECT $50,000 FROM KERR McGEE"
218	6-01-88	Review-Journal: "STATE PUTS HOLD ON SOUTHWEST GAS PLANS TO FIX PIPELINE"
219	6-01-88	Review-Journal: "PEPCON SAFETY RECORDS MADE MORE AVAILABLE"
219	6-01-88	Review-Journal: "MATERIAL FOUND AT BLAST SITE WAS NOT REMAINS OF VICTIM"
219	6-01-88	Las Vegas Sun: "McKAY SAYS WORKERS CAN COPY RECORDS"
219	6-01-88	Review Journal: "OPINION - RIDICULOUS RECORDS LAW"
220	6-01-88	Las Vegas Sun: "PSC ORDERS SOUTHWEST GAS TO KEEP PIPELINE OPTIONS OPEN"
220	6-02-88	Review-Journal: "STATE'S CHEMICAL PICTURE CLOUDY"
221	6-02-88	Las Vegas Sun: "SAMPLE AMOUNTS FROM PEPCON RUBBLE LIMITED"
221	6-02-88	Home News: "OFFICIALS PASS BUCK ON KERR McGEE"
222	6-02-88	Home News: "PEPCON WORKS TO REBUILD POLLUTION ABATEMENT EQUIPMENT PLANT"
222	6-02-88	Las Vegas Sun: "PANEL ORDERS A LIST OF COMPANIES WITH DANGEROUS CHEMICALS"
223	6-03-88	Las Vegas Sun: "SENATOR REID FIELDS QUESTIONS IN HENDERSON"
223	6-03-88	Review-Journal: "RESERVATION SITE WOULD SHELTER PEPCON"
224	6-03-88	Review-Journal: "REID: FIRMS WITH HAZARDOUS MATERIALS MAY MOVE EVENTUALLY"
224	6-02-88	Home News: "SENATE HEARING TO INVESTIGATE FEMA HANDLING OF HENDERSON AID"
224	6-05-88	Las Vegas Sun: "COURT TO HEAR PEPCON CASE"

Page No.	Date	Title
225	6-03-88	Review-Journal: "REPORT: PLANT IS DANGEROUS"
225	5-27-88	Las Vegas Sun: "BODY OF WESTERFIELD STILL MISSING"
226	6-02-88	Las Vegas Sun: "COURT ACTIONS THROW WRENCH INTO PEPCON PROBE"
226	6-04-88	Las Vegas Sun: "COUNTY TO ACT IF KERR McGEE DOESN'T COMPLY"
227	6-02-88	Home News: "GREEN VALLEY COMMUNITY ASSOCIATION - KERR McGEE MUST GO"
227	6-07-88	Review-Journal: "EXPLOSION PANEL TOLD OF POOR HAZARDOUS MATERIALS TRACKING"
228	6-04-88	Las Vegas Sun: "HEALTH DISTRICT LACKING HAZARDOUS PROBES"
228	6-04-88	Review-Journal: "KERR McGEE HIRES EXPERT ON FIRE SAFETY"
229	6-05-88	Review-Journal: "PEPCON BLASTS MAY USHER IN TOUGHER REGULATIONS"
230	6-08-88	Review-Journal: "COUNTY BACKS ZONING CHANGES IN WAKE OF DISASTER"
230	6-04-88	Review-Journal: "CHEMICAL SITE PHOTOS REVIEWED"
231	6-08-88	Las Vegas Sun: "PANEL CAUTIONS PLANT ABOUT SAFETY MATTERS"
231	6-07-88	Review Journal: "KIDD & CO. WORKERS HELP PUBLIC AGENCIES"
231	6-08-88	Review-Journal: "REPORT OF FIRE AT PLANT DISPUTED"
232	6-05-88	Review-Journal: "HOME SALES SAG IN HENDERSON EXPLOSION AREA"
232	6-08-88	Review-Journal: "OPINION - THEY'RE NOT KIDDING"
233	6-07-88	Home News: "SBA BROKE, NO HELP NOW FOR HENDERSON"
233	6-09-88	Review-Journal: "PANEL TOLD EXPLOSIONS HURT NATIONAL SECURITY"
234	6-07-88	Las Vegas Sun: "BLAST PANEL LEARNS OF GAPS IN EMERGENCY SYSTEM"

Page No.	Date	Title
234	6-07-88	Home News: "INDUSTRY'S FUTURE DOMINATES MEETING"
235	6-07-88	Home News: "COUNTY FIRE INVESTIGATION RESULTS EXPECTED SOON"
235	6-08-88	Review-Journal: "GOVERNMENT CONFIRMS AID TO PEPCON, KERR McGEE"
235	6-07-88	Las Vegas Sun: "HIGH COURT DISMISSES UNION'S PEPCON APPEAL"
236	6-07-88	Home News: "CITY FIREFIGHTERS REFUSED ENTRY TO TIMET"
236	6-07-88	Home News: "COMMISSION CHOOSES EXPERTS, RECOMMENDS CHEMICALS LIST"
237	6-07-88	Home News: "ANOTHER VIEW - JOHN DAILEY"
238	6-08-88	Review-Journal: "ARCHIVIST APPALLED BY RECORDS' LOSS"
238	6-08-88	Review-Journal: "RECORDS RECOUNT PEPCON CITATIONS"
239	6-09-88	Las Vegas Sun: "INSIGHT - KIDD MANAGEMENT, WORKERS SHOW TRUE COMMUNITY SPIRIT"
240	6-09-88	Las Vegas Sun: "PEPCON CALAMITY PERSISTS - FUEL SHORTAGE COULD CRIPPLE U.S. DEFENSE - WHITE HOUSE JUST SAYS 'NO' TO HENDERSON"
242	6-09-88	Review-Journal: "PANEL TOLD PLANT MUST REOPEN"
243	6-09-88	Review-Journal: "KERR McGEE TO RESUME PRODUCTION OF CHEMICAL"
244	6-09-88	Las Vegas Sun: "KERR McGEE PLANS TO REOPEN MONDAY"
244	6-11-88	Las Vegas Sun: "COUNTY, KERR McGEE NEGOTIATING ON PLANT OPENING"
245	6-09-88	Review-Journal: "KERR McGEE TO RESUME PRODUCTION"
245	6-09-88	Home News: "HECHT, SBA CROSS SIGNALS"
246	6-10-88	Las Vegas Sun: "DA SENDS FIRE INSPECTORS BACK TO KERR McGEE PLANT - COUNTY INSPECTORS FIND FIRE, SAFETY VIOLATIONS AT KERR McGEE"

Page No.	Date	Title
247	6-10-88	Review-Journal: "OPINION - FEDERAL AID DENIAL APPEARS CAVALIER"
247	6-09-88	Home News: "REAGAN NIXES FEDERAL AID"
248	6-10-88	Review-Journal: "KERR McGEE SAFETY ISSUES UNRESOLVED"
250	6-12-88	Review-Journal: "AMMONIUM PERCHLORATE START-UP DATE"
251	6-12-88	Las Vegas Sun: "INSIGHT - FEDS' DISASTER AID DECISION IGNORES 'THE LITTLE GUY'"
252	6-13-88	Las Vegas Sun: "BRYAN TO WAR WITH PENTAGON - FED UP WITH FEDERAL INDIFFERENCE"
252	6-13-88	Review-Journal: "KERR McGEE BACK IN BUSINESS"
253	6-12-88	Review-Journal: "PEPCON BATCH DRYER UNDER HEAVY SCRUTINY"
254	6-14-88	Review-Journal: PICTURE - FACTORY FIRE NEAR KERR McGEE"
254	6-14-88	Las Vegas Sun: "DOD FEARED PEPCON-TYPE BLAST IN 1982"
255	6-12-88	Las Vegas Sun: "FIRE OFFICIALS IGNORED BMI FACILITIES"
256	6-14-88	Review-Journal: "BRYAN LAUDS NEW JERSEY CONGRESSMAN"
257	6-14-88	Review-Journal: "HECHT AIDE ACCUSED OF LOBBYING AGAINST LETTER FOR DISASTER RELIEF"
257	6-14-88	Las Vegas Sun: "FIRE ERUPTS IN KERR McGEE COMPLEX"
257	6-14-88	Home News: "STATE COMMISSION SETS SEVEN MEETING DATES"
258	6-14-88	Home News: "KERR McGEE STARTS AMID MEDIA SCRUTINY, UNRESOLVED STORAGE DEBATE"
259	6-14-88	Las Vegas Sun: "REAGAN URGED TO RECONSIDER DISASTER AID"
259	6-14-88	Home News: "CITY HAD NO INPUT TO RE-START"
260	6-14-88	Review-Journal: "HECHT AIDE ACCUSED OF LOBBYING AGAINST LETTER FOR DISASTER RELIEF"

Page No.	Date	Title
260	6-15-88	Review-Journal: "HECHT BLASTS BRYAN TRIP TO WASHINGTON"
261	6-14-88	Home News: "FIRES PUNCTUATE WEEKEND"
262	6-14-88	Las Vegas Sun: "INSIGHT - LET INVESTIGATORS DO THEIR JOB IN FINDING BLAST CAUSE"
263	6-14-88	Review-Journal: "KERR McGEE RESUMES PRODUCTION"
265	6-15-88	Review-Journal: "BRYAN IN WASHINGTON TO EXPLORE POSSIBILITIES FOR DISASTER RELIEF"
265	6-15-88	Las Vegas Sun: "AIDE DENIES QUOTE HECHT AGAINST DISASTER AID"
266	6-15-88	Las Vegas Sun: "INSIGHT - KERR McGEE SHOULD MEET FIRE DEPARTMENT'S STANDARDS"
267	6-15-88	Las Vegas Sun: "KERR McGEE, COUNTY BATTLE OVER CHEMICAL STORAGE"
267	6-16-88	Home News: "BRYAN ENCOURAGED AFTER WHITE HOUSE MEETING"
268	6-16-88	Home News: "KIDD WORKERS BEGIN VOLUNTEER WORK"
269	6-16-88	Review-Journal: "BRYAN FILES APPEAL FOR DISASTER AID"
270	6-16-88	Home News: "ONE MAN'S VIEW - MIKE O'CALLAGHAN"
270	6-17-88	Review-Journal: "NO ACCORD REACHED ON STORAGE"
271	6-16-88	Home News: "HENDERSON RESIDENTS OUTRAGED, PROTEST HECHT OFFICE STORY"
272	6-17-88	Las Vegas Sun: "HENDERSON OFFICIAL FAVORS CITY TAKING OVER INDUSTRIAL COMPLEX"
272	6-18-88	Review-Journal: "THIRD TEAM OF INVESTIGATORS TO PROBE DAMAGE IN HENDERSON"
273	6-16-88	Las Vegas Sun: "FEDS GET BRYAN ULTIMATUM - BRYAN AIRS ROCKET FUEL VIEWS"
273	6-17-88	Review-Journal: "HOUSE SUBCOMMITTEE PLANS HEARING ON EFFECTS OF BLASTS"
274	6-18-88	Las Vegas Sun: "INSURANCE CLAIMS SLOW - RESIDENTS EXPLAIN NEED FOR AID"

Page No.	Date	Title
274	6-17-88	Las Vegas Sun: "TEMPORARY OFFICE OPEN FOR HENDERSON DISASTER ASSISTANCE"
275	6-18-88	Review-Journal: "COUNTY, KERR McGEE REACH AGREEMENT"
275	6-17-88	Las Vegas Sun: "SPACING OF OXIDIZER SUPPLIES UNRESOLVED"
276	6-18-88	Las Vegas Sun: "OXIDIZER PACT DOUBLES STORAGE DISTANCE"
277	6-17-88	Review-Journal: "HENDERSON PLANT BLAST COULD SPUR TOUGHER ZONING RULES, MILLER SAYS"
278	6-09-88	Home News: "BLASTS DELAY CATTLE BARON OPENING TO 1989"

LOOSE IN SCRAPBOOK:

5-09-88	Las Vegas Bullet Special Edition
	Open Letters to Community:
5-10-88	Mark Fine - American Nevada Corporation Don Snyder - Chairman of the Board, First Interstate Bank
5-12-88	Selma Bartlett - First Interstate Bank Henderson Mayor and City Council St. Rose de Lima Hospital
5-16-88	American Pacific Corporation
5-15-88	Review-Journal Special Report: "Aftermath of Disaster"
5-22-88	Las Vegas Sun Special Report "Thunder in the Valley"
5-19-88	Letters to the Editor

ALSO AVAILABLE:

Pepcon Explosion Edited Videotapes of Media Coverage - Parts 1, 2 and 3.

Pepcon Explosion Disaster Special Report Videotape - May 4, 1988

GUNNY
BRIZENDINE &
POGGEMEYER
ENGINEERS & PLANNERS

June 21, 1988

Nevada Office of Emergency Management
c/o Mr. Gary Bloomquist, City Manager
City of Henderson
243 Water St.
Henderson, Nevada 89015

RE: HENDERSON, NEVADA & CLARK COUNTY
STRUCTURAL DAMAGE DUE TO PEPCON MAY 4, 1988 EXPLOSION

Dear Mr. Bloomquist:

This will serve to memorialize our telephone conversations of June 20, 1988, relating to the above. Our firm has been extensively involved in structural damage investigations, mostly on behalf of insurance companies.

Our assignments have varied from numerous typical tract homes (most are relatively new), to several commercial buildings of all ages. The ranges from the explosion has varied from less than 1 mile to approximately 6 miles. To date our clients have been either an insurance company, or a contractor which was operating on behalf of one. In most cases, I believe the insurance companies have been generous and expedient, however, there are many complex issues and unknowns involved. Blast related structural damage was extensive and of unusual nature, i.e., types and extent of damage is not always obvious or predictable.

It appears that the blast created an overpressure which was immediately followed by an underpressure. The combined effects of blast pressures has caused damage which is quite different from usual wind or seismic forces; however, the extent of damage has been increased, in some cases, due to poor construction. The types of structural damage observed are, as follows:

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1. Roofs raised off of their supports, and then dropped; thus severing much of the roof-wall connections. Resulting damage is very difficult to detect without extensive inspection, and in most cases some demolition.

2. Roof sheathing has been lifted from its supports (trusses, joists, etc.), thus compromising the roof diaphragm and building integrity. This type of damage is not always readily visible, and usually requires demolition for inspection.

3. Window and door framing in buildings of light wood frame construction, have suffered displacements and a loosening of the header and jamb connections. In many cases this type of damage requires demolition for inspection.

4. Stucco and gypsum board have been extensively damaged due to pulled nails, most are not visible without some demolition to allow access behind.

5. Roof Gabled end walls (mostly residential) have been blown outward, as has many high or vaulted ceiling wall areas. Buildings which sustained this type of damage, generally require replacement of the entire end wall framing, or extensive modifications for structural restoration.

Due to the hidden nature of much of the structural distress, extensive demolition is often required for proper assessment, or some buildings may not be returned to a safe condition, or identification of damage may occur over an extended period of time. If proper assessment of damage and appropriate repiars are not implemented at this time, then the property owner, or a future owner, may well suffer a financial burden because of this hidden damage.

Should you have any questions or comments regarding this matter, please do not hesitate to contact our office.

Sincerely,

George A. Brizendine, P.E.

GUNNY
BRIZENDINE &
POGGEMEYER
ENGINEERS & PLANNERS

CITY

of

HENDERSON, NEVADA

EXPLOSION RELATED STRUCTURAL DAMAGE

DISCUSSION of INVESTIGATION & IDENTIFICATION

PRESENTED, JUNE 24, 1988

GUNNY
BRIZENDINE &
POGGEMEYER
ENGINEERS & PLANNERS

June 23, 1988

City of Henderson
243 Water Street
Henderson, Nevada 89015

To Whom It May Concern:

The subject matter contained herein is for the presentation of George A. Brizendine, P.E., in an open hearing in Henderson, Nevada, on June 24, 1988. The purpose of this report is to supply an overview and typical examples of discussion items which relate to the investigation of structural damage after the FEPCON, May 4, 1988, explosion. It is not intended that this be a stand alone report, i.e., information contained herein would have limited value, and could be misinterpreted without benefit of the verbal discussion information of the presentation.

Respectfully submitted,

George A. Brizendine, P.E.

sr

Lester H. Poggemeyer, P.E.
Robert R. Gunny, P.E.
George A. Brizendine, P.E.

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INDEX

Page

Comparison of Blast Effects to Wind and Seismic 1

Structural Investigation Techniques 2

Damage Identification 3

Callahan Residence Report w/Photos 4

Eggert Residence Report w/Photos 11

Obvious Roof Structure Failures (Photos) 16

Hidden Roof Structure Failures (Photos) 17

Letter to Robert King 19

Curriculum Vitae 21

EXPLOSION RELATED STRUCTURAL DAMAGE

Structural damage which is caused by, or related to, an explosion is unique, when compared to that caused by wind or earthquake.

An earthquake will tend to adversely affect a heavy or massive structure. Serious damage would be expected in the lower portions of the building, or dislodged items in the upper portion. Wind is usually sustained and horizontal (except for tornados, etc.); with resulting damage to lighter and less massive building elements.

Design requirements for wind and seismic lateral forces are well delineated in building codes, and damage from these effects are experienced frequently, and are reasonably well documented. However, such is not the case with overpressure due to explosion, i.e., the usual building code does not address blast effects. The forces experienced by a structure due to an explosion are markedly different than those normally designed for.

Blast effects have similarities to both seismic and wind, but is very transient of short duration, and may resemble an impact. Further, many buildings will become pressurized on the interior after doors and windows have failed.

Upon passage of the blast, much of the damaged structural elements do not appear distressed, even though connections have been totally destroyed, often times serious stuctural damage is not evident, without extensive destructive investigation.

STRUCTURAL INVESTIGATION TECHNIQUES

An initial visual inspection of a facility to evaluate blast effects, will directly reveal only structural damage which is significant, or distress at elements exposed to view. Signs of hidden structural damage may be indicated by distress of finish materials, i.e., cracked stucco, gypsum board, etc.; much damage will not be readily detectable visually.

After visual inspection and interpreting the site observations, a decision may then be formulated as to the probable types and extent of structural damage. If serious structural damage is indicated, then, rather extensive demolition of finish surfaces is usually warranted. Without this destructive inspection, a meaningful comprehensive inspection cannot be completed. To date, all buildings wherein we have removed finishes, structural damage beyond the anticipated was discovered.

DAMAGE IDENTIFICATION

Identification of structural damage may be obvious where that item has been physically displaced or is directly visible. The hidden damage is of utmost concern due to potential long-term negative effects; and is most difficult to predict or locate with certainty.

If finish materials have been damaged or exhibit signs of distress, then chances are there is underlying structural distress. However, many signs of serious underlying structural damage are much more subtle, i.e., loose door or window frames, gypsum board nails loosened, stucco not tightly secured to wall framing, non-uniform roofing, etc. We have seen entire roof structures which were lifted, fell back in place, and left little or no visible damage. When, in fact, these lifted roofs were severely damaged, and the building unsafe for occupancy. Further, it should be noted that original design and construction quality were a major factor in the extent of structural damage.

CALLAHAN RESIDENCE

The following report
and accompanying photographs
pertain to a single dwelling
and are being released for this
presentation with the express
permission of Mr. Wayne Callahan.

GUNNY
BRIZENDINE &
POGGEMEYER
ENGINEERS & PLANNERS

June 15, 1988

Mr. Wayne Callahan
321 Vallarte
Henderson, Nevada

RE: CALLAHAN RESIDENCE, 321 VALLARTE, HENDERSON, NEVADA
POST PEPCON EXPLOSION STRUCTURAL INVESTIGATION

Dear Mr. Callahan:

Pursuant to your request, we have conducted site inspections on May 13, 1988, with your assistance, and on May 26, 1988 and June 10, 1988, with yourself and the contractor, Mr. Peter Benedict. The purpose of our investigation was to determine if the structure had suffered any damage due to the PEPCON accident, May 4, 1988. Our investigation was limited to visual inspection, i.e., quantitative analysis was not undertaken.

The subject structure is a two-story, single family, detached residence. The home was built in Steeplechase Development by Metropolitan Homes within the Green Valley area. The house is oriented with the front of the house facing east, toward the blast origination. The plan configuration is generally square; with the garage located at the north end of the residence, projecting approximately 8 feet toward the front. The south end of the house is one story with scissor trusses spanning east west; creating a vaulted ceiling over the living, dining and family rooms. A wood framed second story is over the kitchen and master bedroom in the northwest corner of the residence. Roof trusses pitched at an approximate slope of 6:12 span from east to west above the living areas and north to south above the garage. The roof framing is sheathed with plywood, covered with concrete tile, and is supported by wood stud exterior walls. Exterior wall surfaces are finished with painted stucco, while all interior wall surfaces are gypsum board. The foundation and first floor (slab-on-grade) are cast-in-place concrete.

Items of pertinent information were reported to us during our inspection, as follows:

1. The residence is approximately 2 years old.

2. The Callahan's are the original owners of the home and observed the construction.

During our site inspection, several observations were made, as follows:

1. The explosions originated at a distance of approximately 2 miles east of the site.

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2. The south gable endwall has suffered significant damage, the top was disconnected from its support for a length of approximately 10 feet. The gypboard joint along the juncture of the vaulted ceiling and the wall had separated; the interior wall finish was cracked in several locations and many heads of gypboard nails were exposed. The exterior stucco had many horizontal and vertical cracks, additionally, some areas of the stucco were loose, i.e., could be moved in and out independent of the studs.

3. A neighboring house which is identical in plan, was partially observed also. The stucco had been removed on the gable endwall at the vaulted ceiling, thus the framing was visible. The wall was constructed with its double top plate connected to the bottom chord of the end truss. No lateral bracing along the line of the truss bottom chord was visible.

4. Areas of disturbed roof tiles were observed in two places on the east side, which faces the blast, and one area on the west. Many of the roof tiles were loose, in these areas the majority had not been nailed or securely fastened in place.

5. Upon inspecting the roof from within the attic, no visible truss damage was observed. The plywood sheathing had pulled away from the trusses 1/4 to 1/2 inch in some locations.

6. Numerous vertical cracks in the stucco were observed around the house. In addition, minor horizontal cracks above and below most wall openings (doors and windows) were visible.

7. Areas of the stucco on the north wall appear to be loose from the wall studs. The stucco moves in and out independent of the framing supporting it.

8. The interior gypboard finish was cracked at numerous locations. In addition, the heads of numerous nails have been exposed in random locations of many walls and ceilings throughout the house.

9. The gypboard ceiling over the living and dining rooms, was observed to have "ripples" at the truss locations. The ceiling appears to have pulled away (downward) from the trusses above.

10. The garage door was blown inward, but the frame appeared to be firmly attached to the jambs and header.

11. The front door and its frame were damaged. The door latch and dead bolt have torn through the frame and partially pulled the door panel apart.

12. The two sliding glass door frames at the rear of the house (away from blast) are bowed outward slightly, the glass did not break. The movable panels bind and do not slide freely.

Based upon the reported information, we have formed opinions on blast damage, as follows:

1. The damage at the south end wall (vaulted ceiling) was due primarily to a construction, and/or, design deficiency. The wall was not adequate to resist the lateral loads, due to the bottom chord of the gable end scissors truss not being braced to support lateral loads perpendicular to the wall.

2. The roof and ceiling damage over the living and dining rooms was due to the roof plywood and gypboard pulling away from the trusses; the trusses themselves were not damaged. Improper attachment of the roof and ceiling sheathing is suspected and a contributor to the extent of this damage.

3. The exterior stucco finish has pulled loose from its supporting wall studs at some locations. However, this problem may be due to insufficient attachment of the stucco backing to the walls studs, and is worse than if the stucco was properly attached.

4. All structural framing at the windows and doors is undamaged. The damage is confined to the architectural items, i.e., doors, glass trim, and stucco finish.

5. The loosening and cracking of the gypboard are probably the result of both structural movement and blast pressure. It is possible that the fasteners are not properly sized, installed and/or spaced. The gypboard may serve as shear panel sheathing in several locations throughout the residence; pulled or inadequate nailing between the gypboard and wall framing may be detrimental to the structural integrity of the residence. The gypboard will need to be correctly renailed, or drywall screws added, to provide adequate attachment of the sheathing to the wall framing.

It is our recommendation that the stucco be removed from the north and south endwalls, to allow visual observation of the framing. If this framing configuration is similar to other homes in the neighborhood, then several diagonal braces from the truss bottom chord to the roof diaphragm will need to be added along the ceiling lines at the north and south walls. The braces should be properly designed and installed to support the lateral loads perpendicular to the endwalls.

Mr. Wayne Callahan
Callahan Residence Investigation
June 15, 1988
Page Four

The roof sheathing will need to be renailed at places where the sheets have pulled loose, and where existing nail size and/or spacing is improper. These locations of loose and raised plywood edges should be obvious when the loose roof tiles are removed. When the plywood sheathing is correctly connected to the trusses, the tiles can be replaced and properly attached. The remaining damage is cosmetic only; the extent of repairs made will need to be worked out between you, the contractor and your insurance company.

Should you have any questions or require additional information, please contact our office.

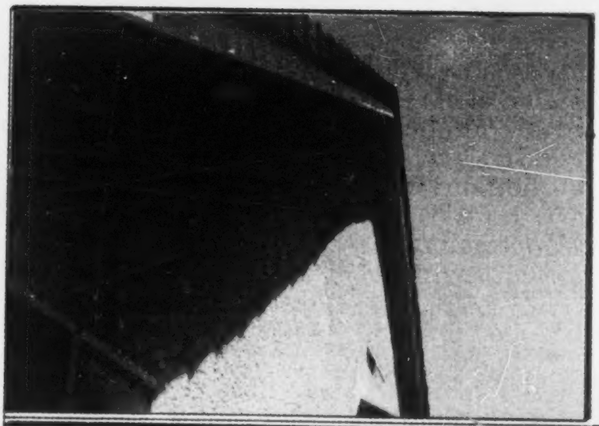
Sincerely,
GUNNY, BRIZENDINE & POGGEMEYER

Mark Steele

Mark Steele

George A. Brizendine, P.E.

sr
Enclosure (Photos)



CALLAHAN RESIDENCE

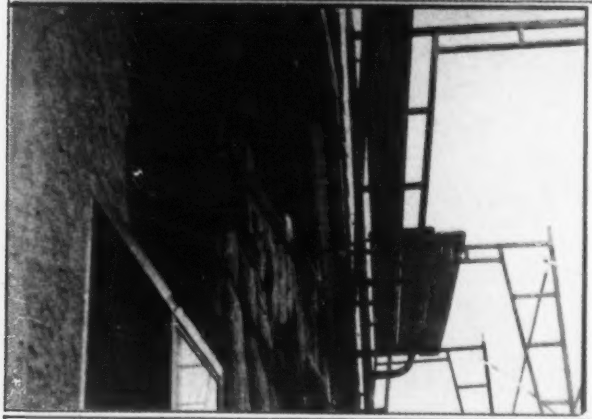
Gabled end wall bowed outward.

Roof sheathing lifted from truss top chords.

CALLAHAN RESIDENCE

Stucco removed from bowed gabled end wall. Structural framing has extensive distress at connections.

Replacement of entire end wall necessary or extensive repairs.



Stucco removed from bowed gabled end wall. Structural framing has extensive distress at connections.

Replacement of entire end wall necessary or extensive repairs.

EGGERT RESIDENCE

The following report
and accompanying photographs
pertain to a single dwelling
and are being released for this
presentation with the express
permission of Mr. Peter Benedict,
Contractor.

June 13, 1988

GUNNY
BRIZENDINE &
POGGEMEYER
ENGINEERS & PLANNERS

Benedict Contractors, Inc.
1433 Commerce St.
Las Vegas, Nevada 89102

Attn: Mr. Peter Benedict

RE: EGGERT RESIDENCE
596 GRIMSBY AVENUE, HENDERSON, NEVADA
POST PEPCON EXPLOSION INVESTIGATION

Dear Mr. Benedict:

Pursuant to your request, we have investigated the above residence after the PEPCON accident. A site inspection was accomplished on May 9, 1988, with your assistance. The purpose of our investigation was to determine if any structural damage had occurred from the explosions on May 4, 1988, at a distance less than two miles. Our investigation was limited to visual inspection; no tests were made to verify the existing materials or configuration.

The subject residence is a one-story, single-family unit approximately 1,000 to 1,200 sq. ft. in area. The house is oriented with the front facing north, away from the blast origination. Construction consists of wood truss roofs supported by wood framed walls. The roof is approximately a 4/12 pitch with plywood sheathing covered by concrete tiles. The exterior wall finish is painted stucco. The foundation and floor (slab-on-grade) are cast-in-place concrete.

Our observations of items pertinent to this investigation, are as follows:

1. The sliding glass doors and their aluminum frames at the kitchen and the bedroom facing the blast were damaged. The damage at the kitchen sliding glass door appears more severe, there is a noticeable bump in the interior gypboard at the header. The exterior stucco has some minor horizontal cracks at the connections of the header and the jambs.
2. The roof trusses span between the front and rear walls, i.e., from north to south. The tiles on the south face of the roof were disturbed and a depressed area in the roof was visible. Upon inspecting the trusses from within the attic, we could see several locations where "gang nail plates" used as a splice in the top chord had failed. A total of seven or eight trusses were visibly damaged.

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3. The east wall is a gable endwall, the height is approximately 20 feet at the peak. The exterior stucco has noticeable vertical cracks. There is no visible evidence to determine which of these cracks were old or new. There were areas where the stucco appeared to be loose from the studs and locations of recent spalling, i.e., the pieces could be found directly below the spalled areas. The interior plaster finish of the east wall was cracked horizontally and vertically at many locations. At a location along this wall, in the master bedroom, the gypboard was broken along horizontal line for a length of 5 to 6 feet.

Based upon the reported observations, we have formed the following opinions:

1. The framing of the sliding glass door at the kitchen will need to be examined further. The actual framing configuration and extent of damage is unknown at this time. The door frame and interior gypboard should be removed to allow visual observation of the connection of the header to the jamb.

2. The damage at the bedroom sliding glass door is limited to the architectural items.

3. The roof trusses can be repaired in-place. The roof should be jacked back and held in proper position until the repairs are made in one of two ways:

    a. The splice could be strengthened by screwing a 2x of the same depth to the face of the existing top chord.

    b. Additional web members of sufficient size could be added to the trusses to provide vertical support of the splice point. Plywood gusset plates could be screwed and glued to the existing truss and new members at points of connection.

4. The damaged pieces of gypboard on the east wall should be removed and a more complete investigation made. Any broken studs should be strengthened by screwing an identical stud to its face.

5. The construction and/or design of the east gable endwalls appears to be deficient. The studs were discontinuous at the bottom of the end truss and no lateral bracing of this connection was observed. This is why the wall was so badly damaged. The stucco finish on the gable endwalls should be removed to allow the repair of this framing configuration by the addition of adequate bracing.

The majority of the damage we observed appears to be directly related to the blast; however, because of the deficient construction of the east wall some of the damage observed may have happened before the PEPCON explosion.

Should you have any questions or require additional investigation when the structure is exposed, please contact our office.

Sincerely,
GUNNY, BRIZENDINE & POGGEMEYER

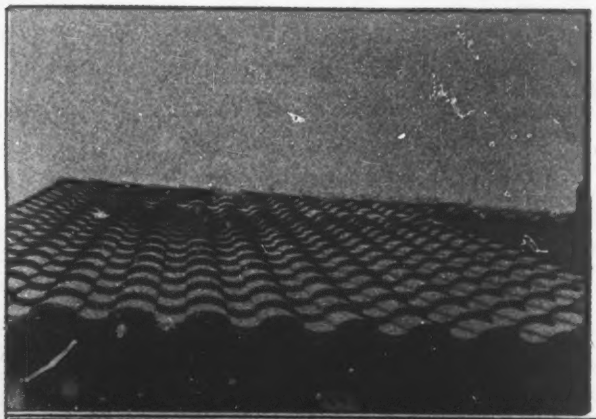
Mark Steele

Mark Steele

George K. Brizendine, P.E.

sr

Enclosure (Photos)



EGGERT RESIDENCE

Uneven and disturbed roof tiles, truss damage at this location, i.e., broken top chord splices.

Other roof truss damage is probably concealed.

Pulled and exposed interior gypsum board nails.

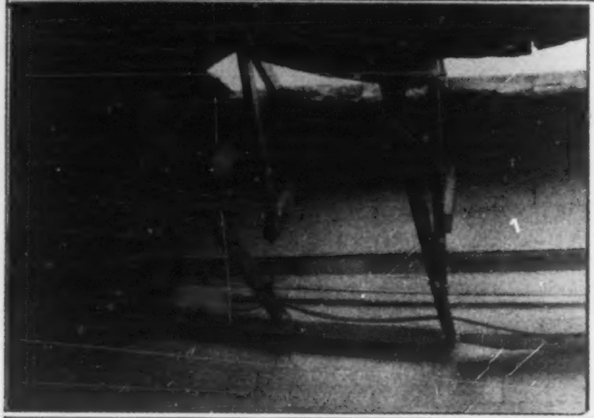
Real damage is probably masked, i.e., loose underlying framing.

OBVIOUS ROOF STRUCTURE FAILURES

Commercial Building

Roof system has been lifted and dropped, thus causing extensive damage; true full extent of damage is not visible.

Gypsum board ceiling has been removed.



Commercial Building

Roof system has been lifted and dropped, thus causing extensive damage; true full extent of damage is not visible.

Gypsum board ceiling has been removed.

HIDDEN ROOF STRUCTURE FAILURES

Commercial Building

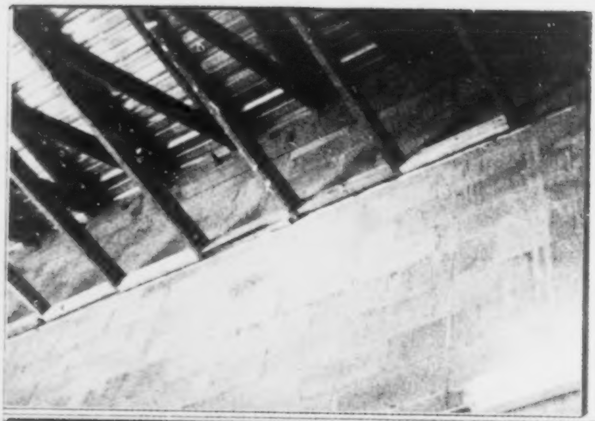
Roof system has lifted, roof boundary attachment remained intact, however, truss web members are distorted with resultant truss damage.

Gypsum board ceiling had to be removed for inspection.

Commercial Building

Roof system has lifted, roof boundaty attachment was destroyed.

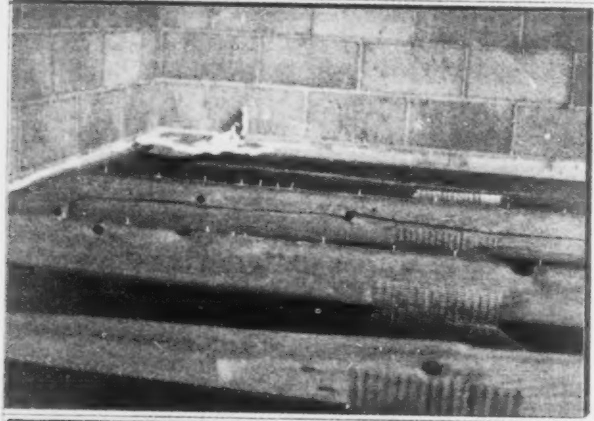
Gypsum board ceiling had to be removed for inspection.



Commercial Building

Metal decking bent downward between truss but roof system has also lifted, lower chord blocking loose.

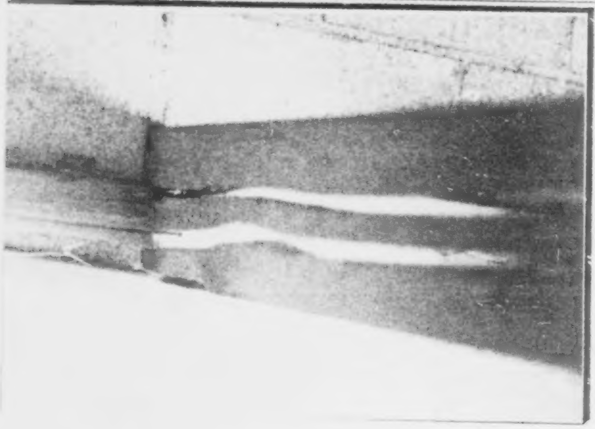
Gypsum board ceiling had to be removed for inspection.



Commercial Building

Roof system lifted truss bottom chords damaged.

Gypsum board ceiling had to be removed for inspection.



Commercial Building

Roof system lifted truss bottom chords and blocking damaged.

Gypsum board ceiling had to be removed for inspection.

LETTER TO ROBERT KING

GUNNY
BRIZENDINE &
POGGEMEYER
ENGINEERS & PLANNERS

June 21, 1988

Nevada Office of Emergency Management
c/o Mr. Gary Bloomquist, City Manager
City of Henderson
243 Water St.
Henderson, Nevada 89015

ATTN: Mr. Robert King

RE: HENDERSON, NEVADA & CLARK COUNTY
STRUCTURAL DAMAGE DUE TO PEPCON MAY 4, 1988 EXPLOSION

Dear Mr. King:

This will serve to memorialize our telephone conversations of June 20, 1988, relating to the above. Our firm has been extensively involved in structural damage investigations, mostly on behalf of insurance companies.

Our assignments have varied from numerous typical tract homes (most are relatively new), to several commercial buildings of all ages. The ranges from the explosion has varied from less than 1 mile to approximately 6 miles. To date our clients have been either an insurance company, or a contractor which was operating on behalf of one. In most cases, I believe the insurance companies have been generous and expedient, however, there are many complex issues and unknowns involved. Blast related structural damage was extensive and of unusual nature, i.e., types and extent of damage is not always obvious or predictable.

It appears that the blast created an overpressure which was immediately followed by an underpressure. The combined effects of blast pressures has caused damage which is quite different from usual wind or seismic forces; however, the extent of damage has been increased, in some cases, due to poor construction. The types of structural damage observed are, as follows:

Lester H. Poggemeyer, P.E.
Robert R. Gunny, P.E.
George A. Brizendine, P.E.

a division of the
Poggemeyer Design Group, Inc.

306 Almond Tree Lane
Las Vegas, Nevada 89104
(702) 735-5108

1. Roofs raised off of their supports, and then dropped; thus severing much of the roof-wall connections. Resulting damage is very difficult to detect without extensive inspection, and in most cases some demolition.

2. Roof sheathing has been lifted from its supports (trusses, joists, etc.), thus compromising the roof diaphragm and building integrity. This type of damage is not always readily visible, and usually requires demolition for inspection.

3. Window and door framing in buildings of light wood frame construction, have suffered displacements and a loosening of the header and jamb connections. In many cases this type of damage requires demolition for inspection.

4. Stucco and gypsum board have been extensively damaged due to pulled nails, most are not visible without some demolition to allow access behind.

5. Roof Gabled end walls (mostly residential) have been blown outward, as has many high or vaulted ceiling wall areas. Buildings which sustained this type of damage, generally require replacement of the entire end wall framing, or extensive modifications for structural restoration.

Due to the hidden nature of much of the structural distress, extensive demolition is often required for proper assessment, or some buildings may not be returned to a safe condition, or identification of damage may occur over an extended period of time. If proper assessment of damage and appropriate repiars are not implemented at this time, then the property owner, or a future owner, may well suffer a financial burden because of this hidden damage.

Should you have any questions or comments regarding this matter, please do not hesitate to contact our office.

Sincerely,

George A. Brizendine, P.E.

sd

CURRICULUM VITAE

George A. Brizendine, P.E.

education...

B.S.C.E....Arizona State University...1963
Graduate Studies...Arizona State University...1963-1965
40-Hour Seminar...Underground Protective Structure...UCLA...1969
40-Hour Seminar...Value Engineering...1985

registration...

Nevada...Civil and Structural Engineer...2452
Arizona...Civil Engineer...8655
Utah...Professional Engineer...3672
New Mexico...Professional Engineer...8827
Colorado...Professional Engineer...21028
California...Civil Engineer...041399
Arizona...Land Surveyor...17170

professional experience...

34 years of structural design and supervision of commercial, institutional, governmental, educational, highway and drainage, and airport facilities. Several years of forensic engineering including failure analysis and expert testimony, and value engineering studies.

Gunny, Brizendine & Poggemeyer, Engineers & Planners (14 Years)

Notable personal designs include the structural design of public areas for the $100 million MGM Grand Hotel (steel frame), Las Vegas, Nevada; structural design of 24 story, $25 million addition (ductile movement steel frame) to MGM Grand Hotel, Reno, Nevada; structural design for the $130 million fire repair & alterations to the MGM Grand Hotel, Las Vegas, Nevada; structural design of $5 million addition to Humana Sunrise Hospital, Las Vegas, Nevada (post-tensioned concrete); structural design of six-story parking structure (post-tensioned concrete) for Humana Sunrise Hospital; structural design of $1.2 million addition to Humana Hospital Davis North; structural design of $21.5 million Humana Women's Hospital, Salt Lake City Utah; structural design of $12 million Engineering Building for U.N.L.V.; structural design of $22 million Humana Women's Hospital, Albuquerque, New Mexico; structural design of the $40 million Meadows Regional Shopping Center, Las Vegas, Nevada. Has completed 10 Value Engineering Studies in the last 24 months for the Corps of Engineers along with municipal waste water treatment plants. Plans review and Construction Inspection for major lending institutions and Nevada State Board of Public Works for large projects, including Riverside Hotel & Casino addition at Laughlin, Nevada; Harvey's Hotel & Casino addition at South Lake Tahoe.

other employments (10 years)

Several years of experience with highly complex nuclear test related structural designs at the Nevada Test Site, including structural response and hardening for strong seismic motion. Design of commercial, governmental and institutional buildings, including the prototype high school facility (sited 4 times) and Vo-Tech High School gym for Clark County School District. Design of several highway bridges and drainage structures in Arizona, including some on the interstate system.

affiliations...

National Society for Professional Engineers
American Society of Testing Materials
National Avcademy of Forensic Engineers
Society of American Value Engineers
American Public Works Association
Member of the NV. St. Board of Registered Prof. Eng. & Land Surveyors
Past Member of Clark Cty. Air Pollution Control Hearing Bd. (11 years)

offices and awards...

Past President...So. NV. Society of Professional Eng.
Past President...NV. Society of Professional Eng.
Past President...Consulting Engineers Council of Nevada
Engineer of the Year 1983, So. NV. Society of Professional Eng.

Clark
County

Office of the County Manager

DONALD L. "PAT" SHALMY
COUNTY MANAGER

DALE W. ASKEW, CPA
ASSISTANT COUNTY MANAGER

MICHAEL P. COOL
ASSISTANT COUNTY MANAGER

CLARK COUNTY BRIDGER BUILDING
225 BRIDGER AVENUE
LAS VEGAS, NEVADA 89155
(702) 455-3530

July 14, 1988

The Honorable Robert Roe
United States Congressman
2243 Rayburn House Ofc. Bldg.
Washington, DC 20515

Dear Congressman Roe:

At the recent congressional committee hearing regarding the Pepcon incident, you indicated your interest in receiving a copy of any reports issued as to cause and origin.

The Clark County Fire Department has released its initial report which is enclosed for your information. A more detailed, final report will be filed in approximately two months. We will forward it to you as soon as it is available.

If you have any questions please contact Chief Roy Parrish, Clark County Fire Department.

Sincerely,

Pat Shalmy

DONALD L. SHALMY

DLS/jp

Enc.

COMMISSIONERS
Paul J. Christensen, Chairman • Thalia M. Dondero, Vice-Chairman
Jay Bingham, Manuel J. Cortez, Karen Hayes, William U. Pearson, Bruce L. Woodbury

Clark County

Clark County Fire Department
707 EAST DESERT INN ROAD
LAS VEGAS, NEVADA 89109
(702) 732-1818 — (702) 455-7311

ROY L. PARRISH
FIRE CHIEF
JOHN PAPPAGEORGE
DEPUTY FIRE CHIEF
ROBERT ATKINSON
ASSISTANT FIRE CHIEF
JAMES BARRETT
ASSISTANT FIRE CHIEF
ROBERT KEATING
ASSISTANT FIRE CHIEF

July 14, 1988

Factors Contributing To Fire Ignition, Spread And Detonation

1. Welders cutting in hazardous area with no fire watch
2. Structural components consisting of highly combustible fiberglass reinforced plastic.
3. A highly flammable and detonable material being stored.
    - (a) Combustible poly drums, over 8,000
    - (b) Near and around buildings where previous fires occurred
    - (c) High density storage practices
    - (d) Housekeeping concerns
    - (e) Weather

At approximately 11:30 a.m. on May 4, 1988, two (2) employees of Pepcon were working on the west end of the batch house building with the use of an oxy acetylene torch. One (1) workman was on the lift cutting holes in the support beam of the building in preparation for hanging new siding. Iron slag was being sprayed out into the batch house building igniting a combination of combustible construction components, product process equipment and residual product in and around the batch house. Fire immediately spread along available fuel surfaces and by thermal exposure and wind velocity spread to the adjacent storage of high density combustible containers of potentially detonable material. The rate and intensity of the fire spread was consistent with fire performance characteristics of the material involved.

Several low order explosions occurred causing structural damage to the plant, further alerting employees of impending disaster and continuing the spread of fire via thermal radiation and flying fire debris.

The fire spread from the batch house area propagated a flame front through the storage area of combustible containers of products.

Page 2
July 14, 1988
Contributing Factors

The high volume of product storage in aluminum tote bins being exposed to intense temperatures and direct flame impingement resulted in two (2) major detonations.

The exact mechanism of detonation, while not precisely known at this time, probably can be determined through science and industry evaluation and continued study of the facts and data obtained here and from ongoing analysis.

Tests this department has called for will provide more data on the behavior of materials involved.

HUGHES

Subsidiary of GM Hughes Electronics

STEVEN D. DORFMAN Vice President

June 21, 1988

Dr. Larry F. Martinez
Office of Commercial Space Transportation
U. S. Department of Transportation
400 - 7th Street, S.W.
Washington, D. C.

Dear Dr. Martinez,

Thank you for the opportunity to communicate our needs for launch services and upper stage propulsion requirements dependent upon ammonium perchlorate. Attached is some information which describes Hughes commercial satellite programs and lists their launch vehicles, and contractual launch dates. In addition, we have included the required manufacturing dates of apogee kick motors (AKM's) and perigee motors (PM's) which also require ammonium perchlorate (AP). Also included are a few articles which refer to several of these programs for additional background.

We are particularly concerned with the JCSat launch scheduled for July 1989 and the BSB launch scheduled for August 1989. Hughes is responsible for delivery of both these satellites in orbit and, hence, is responsible for supplying launch services. JCSat and BSB both have competitive satellites that will be launched by the Ariane launch vehicle. JCSat and BSB will both suffer significant business problems if their launches are delayed due to AP allocations and Hughes will suffer significant financial penalties. Furthermore, the reputation of the U.S. Government in the area of launching communication satellites will be further tarnished if commercial launches are delayed due to unfavorable AP allocations. JCSat is scheduled for a Titan launch and BSB a Delta launch.

If there is anything further we can do to assist you or to support you in this matter of extreme national importance, please feel free to contact us without hesitation. Our focal point in this matter is Mr. John Pollock at (703) 284-4211 or myself at (213) 648-8711.

Best regards,

Steven D Dorfman

Steven D. Dorfman

Attachments

cc: Courtney A. Stadd

Space and Communications Group
PO Box 92919
Los Angeles, CA 90009
(213) 648-8711

ATTACHMENT

The transition to the new space policy of commercial expendable launch vehicles is just about completed. Hughes has been a leader in using commercial launch vehicles and has contracted for Titan III and Delta launches with appropriate contractual commitments to our customers for firm launch dates. Their customers, in turn, have established firm business plans involving the borrowing and commitment of millions of dollars with guarantees to provide in-orbit service on an exact date. In the case of the British Satellite Broadcasting (BSB) and the Japanese Communications Satellite Co. (JCSat), these customers are in a rigorous competition for the service they intend to provide. Each currently sees their early competitive posture slipping away as the launch delay allows their competition to claim reduced prices and other incentives for waiting until their satellite is launched and their system becomes operational. In the case of BSB, this could be disastrous. Success in the volatile European direct broadcast market is largely dependent upon the earliest service date that can be provided. Hughes has entered into this risk by accepting a deferred payment contract of $100M on the satellites we will be delivering for BSB service. This is the first civil/commercial satellite service ever to be awarded to a non-European satellite producer. BSB also deliberately chose the McDonnell-Douglas Delta booster because of their conviction that a U.S. booster offered added stability and security over a similar European or Chinese launch. They judged that the risk would be lower.

In the case of JCSat, Hughes is a partner in a joint venture with C. Itoh and Mitsui to establish a commercial communications business in Japan. A substantial percentage of the capacity of JCSat is committed to Japanese corporations who are planning to initiate satellite communications in 1989.

If the launch of the second JCSat on a Titan III is delayed six to twelve months, there could be losses to the joint venture possibly exceeding $70M. In addition, the business plans of our customers could be significantly dissipated. JCSat's competitor in Japan is planning an Ariane launch in 1989. The JCSat launch has already been altered once due to the Challenger problem and the U.S. decision not to launch JCSat on Shuttle as originally planned.

The decisions of the Interagency Working Group in the wake of the space shuttle Challenger and other booster failures, placed an embargo on the launch of commercial satellites by NASA. We are in the process of recovering from two years filled with doubt and indecision by our customers seeking to provide new satellite services. We now have three U.S. booster manufacturers offering commercial launch services. Two of them depend on ammonium perchlorate for their solid rocket motors; Martin-Marietta for their Titan III and McDonnell-Douglas for their Delta II. We have contracted with each for launch of JCSat and BSB, respectively. We are informed that current supplies of AP are insufficient to provide the solid rocket motors to meet the contracted launch dates (July 1989 and August 1989).

Our knowledge of the AP production capability and the supplies available at the various manufacturers suggest that the Interagency Working Group has wide latitude to defer nonessential stock pile in favor of short term needs where the future of a business is at stake. These new businesses were born of the U.S. space program; contributes significantly to our balance of payments (hundreds of millions of U.S. dollars) and are representative of the recovering American presence in space. Your early favorable consideration is requested.

1989 - 1990 HUGHES AIRCRAFT COMPANY REQUIREMENTS FOR AMMONIUM PERCHLORATE

PROGRAM	LAUNCH VEHICLE	LAUNCH DATE	BOOSTER A.P. REQUIRED IN LBS & MANUFACTURER	YEAR A.P. REQUIRED POUR DATES	NUMBER OF MOTORS	AKM OR PKM	NUMBER OF BATCHES	WEIGHT A.P., LBS.	MANUFACTURER
HS-393 (JC SAT)	Titan III	7/89	680,000 UTCSD	9/88	1	P	2	10,000	UTCSD
Leasat	Shuttle	8/89	1,707,200 Thiokol	9/88	1	P	2	10,000	UTCSD
BSB-1	Delta	8/89	150,000 Hercules	3/89	4	A	1	5,000	Thiokol
Palapa B2R	Delta	6/90	150,000 Hercules						
BSB-2	Delta	3/90	150,000 Hercules		4	PAM	4	20,000	Thiokol
Asiasat	Long March 3	11/89		3/89	2	A	1	5,000	Thiokol
Intelsat VI (MMB-3)	-	-		12/89	1	P	5	25,000	UTCSD
Aussat	Not Selected	12/92 6/93		12/91	3	P	6	30,000	Thiokol
GMS-V	Japanese	94		93	2	A	1	5,000	Thiokol
TOTAL			2,837,200		18		22	110,000	

(FORTUNE AUGUST 3, 1987)

To become truly international, a company must address the issue of its human resources as well as its overseas offices or manufacturing plants." That's the view of **Isao Yonekura**, president of **C. Itoh & Co., Ltd.**

By most standards, his company already would be certainly considered global in its scope of operations. It has 146 offices in 86 foreign countries and thousands of employees around the world.

Still, Yonekura won't consider his company fully internationalized until at least one director is a foreigner and when non-Japanese executives are heads of overseas offices.

As another step toward making C. Itoh a "globally integrated corporation" instead of a traditional Japanese "trading company," Yonekura seeks to give managers of key regional offices overseas the authority and responsibility to make their offices profit centers.

"General strategy may come from the head office in Tokyo, but we would hope regional offices will establish policies and implement their own programs to generate business. This would encourage business within regions," Yonekura says.

While such reorganization plans are being carried out under a three-year plan, C. Itoh has already embarked on some major departures from its past areas of business. One involves the establishment of the Japan Communications Satellite Co., Inc., or JCSAT, for short.

C. Itoh's Yonekura looks to space for new challenges and corporate growth.

It is a consortium headed up by C. Itoh, Hughes Communications, Inc. and Mitsui & Co., Ltd. JCSAT will eventually invest some 86 billion yen (about $60 million) in the construction and launch of an earth-orbiting communications satellite. Originally, it was to have been put into geostationary orbit by an American space shuttle.

The Challenger disaster, however, forced JCSAT to switch to a launch by the French Ariane rocket, now scheduled to take place sometime between December 1988 and February 1989. Yonekura says the Japanese satellite, yet unnamed, will have 64 transponders able to relay television signals, voice communications and computer data for domestic use.

"We are now in an information-oriented society," says Yonekura. "It is the role and even the responsibility of an integrated trading company such as ours to become involved with industries related to this technology."

By no means is the JCSAT launch purely a matter of national pride. C. Itoh has already established a planning company to oversee control of the satellite. In addition, other companies related to services the satellite can provide are being formed.

C. Itoh is keenly interested in opportunities inherent in international and domestic communications.

"We feel we are at the threshold of information oriented industries," says Yonekura. "So we must plan for the future now."

Talking Deals

Richard W. Stevenson

Satellite Risks Shifted by Pact

THE Reagan Administration's decision to turn over the launching of commercial satellites to private industry has opened the way for innovative business deals between satellite users, makers and launchers.

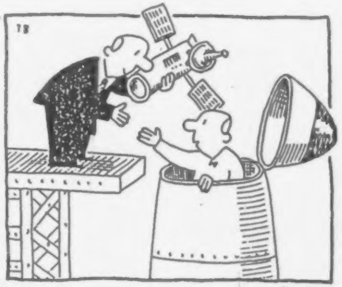
The role model may well turn out to be the deal reached between the Hughes Aircraft Company, McDonnell Douglas Astronautics and a start-up company called British Satellite Broadcasting Ltd. It not only creates new ways of spreading the financial risks of sending satellites into space but provides a glimpse of the emerging commercial launch industry itself.

Times have been tough lately for satellite makers such as Hughes, a subsidiary of the General Motors Corporation. Orders for new satellites have been few and far between since the loss of the Challenger space shuttle and a string of other rocket failures temporarily shut down the nation's launch capacity. Then the Administration decided to take commercial satellite launches away from the National Aeronautics and Space Administration and turn them over to private industry.

• • •

So when British Satellite came along wanting to buy two communications satellites and the launches needed to get them in orbit, it had a good deal of bargaining power — both with Hughes, which wanted to build the satellites, and McDonnell Douglas, which wanted to launch them. British Satellite is a new company based in London with a plan for broadcasting four new television channels from a satellite directly into British homes equipped with special 12-inch receiver dishes.

The deal revolved around British Satellite's need to raise the funds to buy and launch the satellites while soothing the nerves of investors fearful of seeing their money explode on the launch pad or plummet into the sea.



Tom Bloom

Its $304 million contract with Hughes calls for "in-orbit delivery" of two satellites. That is, Hughes is responsible not only for building the satellites, but also for getting them safely into orbit and making sure they are fully operational in space. If something goes wrong before the satellite is turned over to British Satellite, Hughes must replace it and have it launched again. To launch the satellite, Hughes has turned to McDonnell, which is actively seeking customers for its Delta rockets.

In an industry where the satellite buyer has always arranged the launch and assumed the risks itself, the contract was a first.

"The basic reason for an in-orbit deal is that we're a start-up company and we have to raise equity," Graham Grist, who heads the British Satellite venture, said in a telephone interview from London. "We didn't think we'd be able to raise equity against the risk of a launch."

With the contract in hand, British Satellite was able to complete the process of raising $350 million in initial financing from private investors. In addition to insulating the company financially from the possibility of losing the satellite, the deal also frees British Satellite from the tasks of arranging the satellite's launch and lining up insurance. The first launch is scheduled for 1989.

Hughes thinks the contract serves it well, too, despite the added burden the satellite maker is assuming. Mr. Grist said the contract provides Hughes more money for taking the risk and arranging the launch and insurance. Steven Dorfman, a Hughes vice president and assistant group executive at the space and communications group, declined to specify the terms but acknowledged that the agreement "changes the balance of risks and rewards from where it was before."

• • •

To cover the risk of losing a satellite on launch or discovering that it does not work in orbit, Hughes plans to go to insurers to arrange a policy, but they have been wary of issuing such policies in the wake of recent launch mishaps, and, indeed, space insurance is virtually nonexistent now.

For McDonnell, the launch contract, worth $100 million, gives the company a small head start on competitors, such as the Titan rocket of Martin Marietta, which, like McDonnell, has already lined up tentative customers for other non-military satellite launches. Both McDonnell and Martin are already building rockets for the Air Force to carry military and other Government payloads into space in place of the space shuttle.

Moreover, McDonnell has agreed to a provision that may set a standard regarding the financial liabilities of private launchers. One of the major stumbling blocks in the start-up of the commercial space business has been the question of who pays for the damages of an accident on a Government-owned launch pad or a crash or explosion in a populated area. To get commercial customers to sign on, McDonnell has reluctantly agreed to assume the risk itself without any insurance.

Raymond Snoddy reports on preparations for the launch of DBS

Countdown to satellite blast-off

ON AUGUST 15 1989, if all goes to schedule, a McDonnell Douglas Delta rocket will blast off into space carrying with it the satellite that will launch direct broadcasting by satellite in the UK.

It wil lbe the world's first DBS project to be funded entirely by the private sector, and three new national channels of television — four individual programme services—should be available all over the UK and much of northern Europe within weeks of the launch.

Mr Graham Grist, finance director of British Satellite Broadcasting, the consortium that holds Britain's 15-year DBS franchise, said: "Our aim is to make satellite receiving equipment THE Christmas present of 1989."

BSB hopes to attract 400,000 subscribers in its first year—150,000 before Christmas 1989.

However, consultants such as CIT Research estimate that BSB will be lucky to have 150,000 subscribers by the end of its first five years of operation.

With the first-round financing of £225m complete and the major contracts signed, the consortium has set up a space advisory board, bringing together satellite experts from around the world to monitor the progress of the space segment of the £625m project.

On the ground, BSB, which has among its shareholders Granada, Pearson (which publishes the Financial Times), Virgin, the Bond Corporation of Australia and Reed International, has been concentrating on making sure the special D-MAC microchips for the receiving equipment are produced on time.

It has already decided that the capacity for pay-per-view should, if possible, be incorporated in the electronics of the receiving system from the beginning.

This would give BSB the ability to charge for individual programmes such as boxing matches or film premieres. The charge would be in addition to a monthly subscription for the film channel and the advertising-funded general entertainment, family and news and live events services.

"We must have pay-per-view in the system. It would be pretty stupid to lock it out," said Mr Grist. He added that the company had about two months to decide on the most effective system.

Although pay-per-view would give BSB a third stream of revenue, it would probably not be activated until the number of subscribers had built up."

Leading microchip manufacturers are already expressing interest in producing the D-MAC chips neded to pick up the television signals from space.

Mr John Warren, a senior executive of Mullard, the electronic components company which is part of Philips, said: "We are looking forward not just to supplying the chips but the other components as well. The whole industry has been waiting since 1982 for an opportunity like this."

BSB's aim is to concentrate on ensuring the production of specially dedicated receivers 1ft in diameter that will be able to receive only BSB signals for as close to £200 as possible.

"The market research shows the size of dish is very important," said Mr Grist. It will be a bonus if manufacturers also decide to produce more expensive dish aerials that can receive all the growing number of satellite channels available.

Sir Trevor Holdsworth: convinced Government backs project

Dr John Forrest, director of engineering at the Independent Broadcasting Authority, said yesterday: "I think there are very good opportunities for the UK consumer electronics industry to get involved, particularly for smaller companies."

Mr Grist hopes that the cost of DBS receiving equipment will fall to nearer £50 when the electronics are integrated in television sets instead of being housed in a separate box sitting on top.

BSB is expected to announce the name of its first chief executive and the site of its uplink station—which will beam up the programmes to the satellite—later this month.

The chief executive is believed to be a retail marketing specialist rather than a broadcaster—an indication of how much importance is placed on selling DBS to the UK public.

The person chosen will be responsible for appointing broadcasters to schedule the four programme services, which will have a budget of £100m in the first year. The first signs are that each of the four very different services will probably have its own programme controller.

Grist said the need to obtain a return on the huge investment meant that BSB would have to make a big effort to reach the mass market audience, at least in the early days. However, Independent Television News is expected to provide between 10 and 12 hours a day of news and live events for the NOW channel.

BSB has chosen Sir Trevor Holdsworth to be chairman of the large, risky industrial project. He will retire next year as chairman of GKN, the engineering group, and is "president-in-waiting" of the Confederation of British Industry.

Sir Trevor is convinced that the Government is determined that the UK DBS venture should succeed and would be unlikely to damage its chances with the premature launch of competing channels.

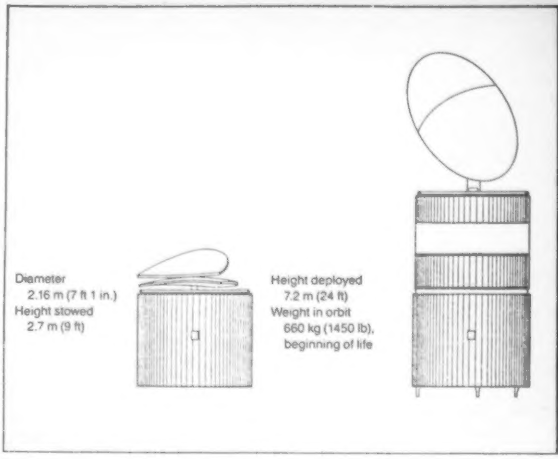
Asked whether he had ever been involved in a project involving so much "up-front" capital for such a long-term project, Sir Trevor pointed to front-wheel drive.

GKN invested heavily in producing the constant velocity joints used in front-wheel drive vehicles when such systems were rare and went on to become the world's largest independent manufacturers of them.

Although cars are a world away from satellite television, the BSB chairman will be happy if DBS proves as successful as front-wheel drive.

BSB

HUGHES
AIRCRAFT COMPANY
SPACE AND COMMUNICATIONS GROUP



UNITED KINGDOM'S FIRST DIRECT BROADCAST SERVICE

In July 1987 British Satellite Broadcasting Ltd. (BSB), a privately owned and operated company, selected Hughes Aircraft Company to design and build two HS 376 satellites for the first direct broadcast service (DBS) in the United Kingdom. Additionally, Hughes agreed to purchase and handle all aspects of the launch and insurance and to deliver the satellites only after they have been thoroughly tested in orbit.

In an agreement that inaugurates the new commercial launch industry in the United States, Hughes has contracted with McDonnell Douglas to supply two Delta rockets. The current Delta model will boost the first BSB satellite in August 1989, and a Delta II (an enhanced version being developed for the Air Force) will launch the second satellite.

Key to the BSB direct broadcast scheme is having a satellite with enough power to be received by very small (12 inch/0.3 m diameter), low cost dishes, thereby making DBS affordable for the public. Each satellite will be equipped with three 110 watt channels. With a footprint that covers the United Kingdom, the satellites will broadcast a mix of news, sports, and current affairs; light entertainment; children's daytime TV; and a subscription nighttime movie channel. BSB's four new program services will almost double the number of existing channels available in the United Kingdom. Teletext will also be beamed into homes and businesses and could provide computer software, business and financial services, and electronic newspaper distribution.

The spin-stabilized HS 376 has proven to be a highly reliable and adaptable spacecraft. Twenty-six are in active service. The basic bus accommodates a wide range of customized payloads, as demonstrated by versions built for six countries and four U.S. companies, each with unique requirements.

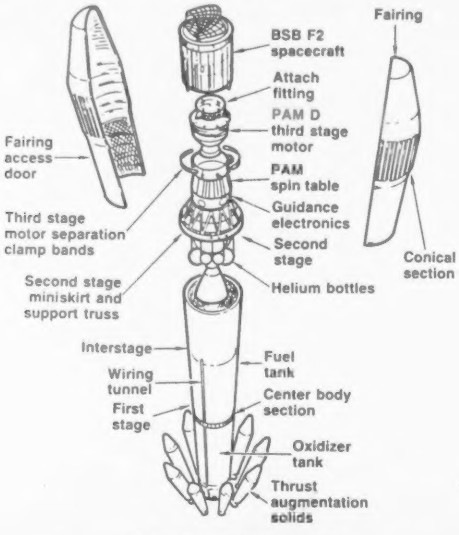
The BSB satellite design represents the first high power DBS use for the HS 376. Innovative communications electronics and a new Hughes-developed super nickelcadmium battery made the high power conversion possible. The battery provides sufficient power to maintain uninterrupted high power DBS coverage during eclipse, a condition caused when the earth's shadow prevents the sun from shining on the satellite's solar cells. To achieve the necessary 110 watts per channel, Hughes engineers linked two proven 55 watt traveling wave tubes (TWTs) parallel to a common power supply. Such a paralleling arrangement allows TWTs to be reconfigured by telecommand to either high or low power. The satellite will contain five Ku band transponder channels, but only three will be powered at any time.

To further accommodate high power requirements, the BSB spacecraft uses longer solar panels covered with large area solar cells and a single bus system rather than the typical dual bus. The solar cell output at beginning of life is 1100 watts.

The satellite receives the TV, radio, and teletext transmissions, which are then broadcast by the 100 by 68 inch (254 by 173 cm) elliptical reflector to thousands of homes and business sites throughout the United Kingdom. The antenna provides a signal strength of 59 dBW. A precision antenna pointing system, proven on previous HS 376 satellites, maintains the antenna pointing accuracy at better than 0.05 degree.

Compactly stowed for launch, with antenna reflector folded down and cylindrical solar panels telescoped together, the BSB satellites measure 9 feet (2.7 m) in height and 7 feet, 1 inch (2.1 m) in diameter. After the Delta rocket injects the spacecraft into transfer orbit, a Thiokol Star 30BP apogee kick motor attached to the spacecraft is fired to circularize the orbit at 22,300 miles (36,000 km), geosynchronous altitude. As the satellite moves into its orbital position at 31°W longitude, its solar panels are extended and the antenna reflector is raised, bringing the satellite height to nearly 24 feet (7.2 m). In-orbit at beginning of life, the satellite weighs 1,450 pounds (660 kg) and carries enough hydrazine monopropellant to stay on-station for its 10-year life.

Hughes is also building the telemetry and monitoring equipment for the ground station, to be located in Southampton. As with other international programs, Hughes will train BSB ground station personnel.


Fairing
BSB F2 spacecraft
Attach fitting
PAM D third stage motor
Fairing access door
PAM spin table
Guidance electronics
Third stage motor separation clamp bands
Second stage
Conical section
Second stage miniskirt and support truss
Helium bottles
Interstage
Fuel tank
Wiring tunnel
Center body section
First stage
Oxidizer tank
Thrust augmentation solids

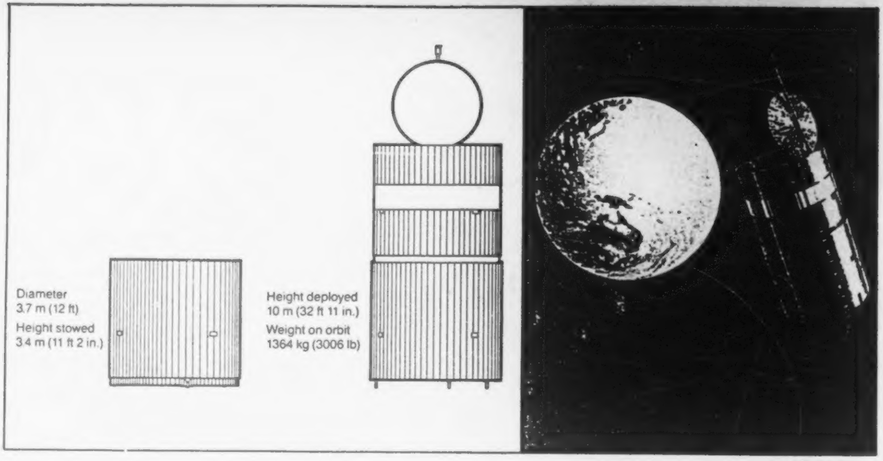
DELTA II LAUNCH VEHICLE

SCG 876937M/2500/1-88

PUBLIC RELATIONS
SPACE AND COMMUNICATIONS GROUP
HUGHES AIRCRAFT COMPANY
EL SEGUNDO, CA 90245
USA

JCSAT

HUGHES
AIRCRAFT COMPANY
SPACE AND COMMUNICATIONS GROUP



JAPAN'S FIRST COMMERCIAL COMMUNICATIONS SATELLITE

Japan Communications Satellite Company (JCSAT) will begin the first commercial communications satellite service in Japan with the launch of two JCSAT satellites, the first scheduled for March 1988 on the Ariane 4 booster. Jointly owned, JCSAT combines the technical, marketing, and satellite expertise of Hughes Aircraft Company with the business, financial, and marketing strengths of C. Itoh and Company, Ltd. and Mitsui and Company, Ltd.

JCSAT will offer Japanese businesses their first opportunity to use satellite-borne telephone, television, facsimile, and high speed data services. In addition, the JCSAT spacecraft will transmit high quality broadcast video and data directly to customer sites. The satellite's high power and large antenna permit the use of on-premises ground antennas, which can be as small as 4 feet (1.2 meters) in diameter, significantly cutting the cost of data distribution for business.

In June 1985, JCSAT awarded contracts for the two spacecraft; two control stations outside Tokyo; and launch, mission, and insurance arrangements to Hughes Communications, Inc. (HCI), a wholly owned subsidiary of Hughes Aircraft Company. Working through HCI, Hughes Space and Communications Group (SCG) is designing and building the satellites.

JCSAT selected SCG's new widebody satellite model, the HS 393. A spin stabilized spacecraft, it is similar to the popular HS 376 model, but has nearly twice the size, power, and channel capacity. Operating at the Ku band frequency, the spacecraft will provide thirty-two 27 MHz wide channels, each containing a nominal 20 watt transponder. On orbit, with solar panels deployed and antenna raised, the satellite will be 32 feet 11 inches (10 meters) high and weigh 3006 pounds (1364 kg). Yet it stows compactly for launch. With solar panels telescoped together, antenna reflector folded down, and perigee motor tucked inside, it measures only 11 feet 2 inches (3.4 meters) in height and 12 feet (3.7 meters) in diameter.

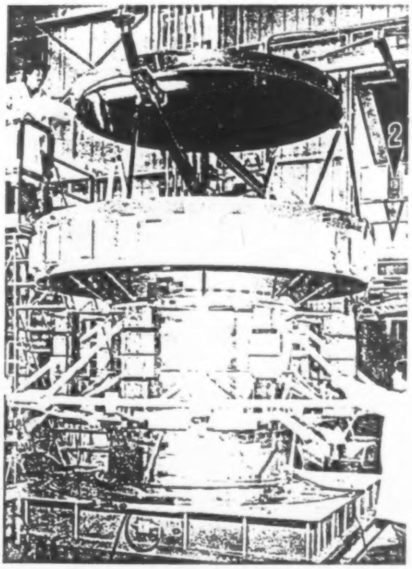
The large 8 foot 2 inch (2.4 meter) antenna and multihorn feed array will produce a shaped beam on the contour of the four Japanese main islands and Okinawa, providing a signal strength of 50 dBW over the most densely populated areas. The antenna is actually two offset polarized reflectors, one sensitive to vertical polarization, the other to horizontal. This design doubles frequency use.

K7 and K4-3/4 solar cells cover the surface of the satellite's two cylindrical solar arrays and will generate 2350 watts at the beginning of life. Two 38 ampere hour nickel-hydrogen batteries will provide power when the satellite is in the earth's shadow.

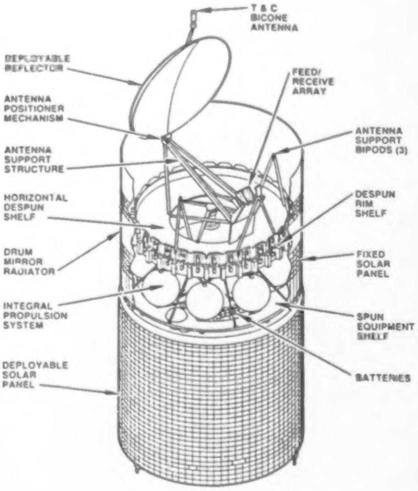
The JCSAT satellites are compatible for launch on either the space shuttle or the Ariane 4 booster. With the Ariane 4, the satellite is placed directly into a synchronous transfer orbit. On a selected apogee, the spacecraft's onboard liquid bipropellant system (LBS), comprised of fuel, oxidizer and thrusters, is fired to circularize the orbit at the 22,300 mile high synchronous orbit. For this function, the LBS uses two 100 pound-force Marquardt R-4D thrusters. The LBS uses six 5 pound-force thrusters to provide impulse for station acquisition and stationkeeping.

On a space shuttle launch, the satellite is ejected Frisbee style from the payload bay. After drifting away from the shuttle for 45 minutes, the satellite is thrust into transfer orbit by its solid fuel perigee kick motor. Then, with successive firings, the LBS propels the satellite to synchronous altitude.

The satellites will be located at 150° and 154° E longitude and are designed for a 10 year life.



Structural model of the HS 393 is prepared for vibration testing in Hughes Space Simulation Laboratory.


T & C BICONE ANTENNA
DEPLOYABLE REFLECTOR
FEED/ RECEIVE ARRAY
ANTENNA POSITIONER MECHANISM
ANTENNA SUPPORT BIPODS (3)
ANTENNA SUPPORT STRUCTURE
DESPUN RIM SHELF
HORIZONTAL DESPUN SHELF
FIXED SOLAR PANEL
DRUM MIRROR RADIATOR
INTEGRAL PROPULSION SYSTEM
SPUN EQUIPMENT SHELF
DEPLOYABLE SOLAR PANEL
BATTERIES